Required Christian Theological and Ethical Restrictions on AU Chips for Security Purposes

Christian Theological and Ethical Restrictions on AIChips for Security

AI chips (chips for artificial intelligence) or neural implants (brain chips), such as Neuralink, that integrate AI with the human brain, I will describe the key limitations based on Christian theology and ethics. These views are based on the principles of the Bible, such as the dignity of man as the image of God (Gen 1: 26-27), responsibility to the Creator, and care for one's neighbor (Mt 22:39). Christian theologians emphasize that technology should serve people, not replace or degrade them. The required security restrictions are grouped by category below.

1. Preserving human dignity and the boundaries of human nature

- AI chips should not be used to "enhance" healthy people if it goes beyond the scope of God's plan for a person. For example, implants to improve cognitive abilities (memory, intelligence) can blur the line between man and machine, which contradicts the idea of man as a unique creation of God. Theologians warn that such technologies can lead to "dehumanization", where people become objects of experiments, rather than carriers of the image of God.
- Restriction: Use only for therapeutic purposes (restoration of lost functions, as in the paralyzed), and not for "superhuman" improvements. This is consistent with an ethic where technology is supposed to heal, but not rebuild God's creation unnecessarily.

2. Maintaining human control and preventing idolatry

- AI must remain under full human control to avoid scenarios where machines make decisions for humans or manipulate them. Christian leaders insist that AI cannot be "godlike" or replace God as the source of wisdom and morality. If the chips allow AI to influence thoughts or behavior, it can violate the freedom of will given by God.
- Restriction: A ban on autonomous systems without human supervision. Development should include ethical " limiters "(guardrails), so that AI can not harm or deceive. Christians should participate in the design to embed biblical values such as honesty and love for one's neighbor.

3. Ethical principles of development and use

- Technologies should be transparent ,accountable (with responsibility) and respect privacy. Christian ethics requires that AI chips do not collect data without consent and do not create biases that discriminate against people. In medicine, AI should respect the dignity of the patient and promote authentic human development, not replace human care.

- Restriction: Mandatory ethical review with the participation of theologians. Prohibition of using it for manipulative purposes (for example, in marketing or mind control). Security includes protection against hacker attacks that could disrupt the brain or psyche.

4. Security and risk prevention

- For safety reasons, the chips must pass rigorous tests for the absence of harm to health, including long-term effects on the brain. Christians emphasize that technology should not harm the body as the temple of the Holy Spirit (1 Corinthians 6: 19-20).
- Restriction: Regulation at the level of the state and churches, including the prohibition of experiments without informed consent. If technology threatens spiritual life (for example, by causing addiction or delusions), it must be restricted.

5. Broad context: The role of the Church and society

- The church must actively participate in the debate so that AI reflects the values of the common good, not just profit. This includes calls for global standards where AI serves humanity, not elites.
- Limitation: Christians should not ignore technology, but use it wisely for the Kingdom of God, avoiding techno-optimism or pessimism.

In general, Christian restrictions focus on AI chips enhancing, rather than replacing, human potential by always obeying God. If a technology violates these principles, it can become an idol or a threat. For an in-depth study, it is recommended to refer to documents such as the Rome Call for AI Ethics from the Vatican or reports of the Evangelical Alliance.

Required Christian Theological and Ethical Restrictions on AU Chips (Acta Universi Chips) for Security purposes

Based on the available information, the Acta Universi (AU-field) hypothesis, proposed in 2025 by Yashchenko, describes AU-chips as quantum devices for AI, capable of reading, processing and recording thought forms in a universal archive of events. This raises serious questions about the interaction of technology with human consciousness, entropy, and universal reality. Christian theology and ethics, based on the Bible (for example, Genesis 1: 26-27 on man as the image of God, 1 Corinthians 6: 19-20 on the body as the temple of the Holy Spirit), emphasize the need for restrictions to protect human dignity, free will, and submission to God. Below are the key restrictions grouped by category for security reasons.

1. Preserving human dignity and the boundaries of nature

- AU chips that allow access to thought forms($s_{} \geq \geq 10$ бит bps)can blur the line between man, machine, and the "universal archive", which contradicts the biblical understanding of man as a unique creation of God. This can lead to dehumanization, where thoughts become data for manipulation.
- Restriction: It is forbidden to use it for" strengthening " healthy individuals or integrating with consciousness without medical necessity (for example, only for the treatment of neurological disorders). Technology should not violate the autonomy of the soul, as the Church teaches about free will (Ser. 15: 14-17).

2. Preventing idolatry and loss of control

- Access to the" universal archive of events " can create the illusion of divine omniscience, replacing God as the source of truth (Isaiah 45: 5-6). Christian theologians warn of the risk of technology idolatry, as in the case of the Tower of Babel (Gen. 11).
- Restriction: Full human control over the chips; ban on autonomous systems that can "write" thought forms without consent. The development should include ethical mechanisms based on biblical values (honesty, love for one's neighbor), with the participation of church experts.

3. Ethical principles of privacy and consent

- Reading and writing thought forms threatens the privacy of the mind, which is contrary to respect for the individual (Matthew 7: 12 on the golden rule). This can lead to abuse, such as control or blackmail.
- Restriction: Mandatory informed consent; strict data protection rules for thoughtforms. Prohibition of using it for commercial, military, or manipulative purposes (for example, marketing or propaganda). Ethical review of projects with theological risk analysis.

4. Security and risk prevention

- High entropy ($s_\Theta > 10$ бит bits/s in topological models like FQHE) carries mental health risks, including addiction or reality distortion. The body as a "temple" should not be harmed.
- Restriction: Long-term safety tests; prohibition of experiments without ethical approval. If the technology threatens spiritual life (for example, by creating "entropic echoes" as illusions), it should be banned. Regulation at the state and church level to prevent hacker attacks or weapons.

5. Broad context: The role of the Church and society

- The Church must participate in the debate so that AU chips serve the common good, not elites or anti-Christian goals (such as transhumanism). This is in line with the call to use God's gifts wisely (Proverbs 2:6).
- Restriction: Global standards with an emphasis on justice; prohibition of application in areas that contradict the Gospel (for example, immortality through chips as a substitute for eternal life in Christ).

In general, Christian restrictions require that AU chips obey God, enhancing human potential without substituting for the Creator. Without these measures, technology can become a threat, like an idol or an instrument of evil. For further study, it is recommended to refer to encyclicals like Pope Francis' Laudato Si ' on technology and ethics, adapting them to this hypothesis.

Entropy details in AU chips (Acta Universi chips)

Based on the Acta Universi (AU field) hypothesis proposed by Yashchenko in 2025, AU chips are quantum AI devices designed to read, process, and write thought forms to the universal event archive. Entropy plays a key role in their functioning, determining information capacity, stability, and potential risks. Entropy is understood here as a measure of disorder or information density in a system, related to quantum fluctuations and topological properties. Detailed aspects based on the hypothesis descriptions are shown below.

1. Basic concepts of entropy in AU chips

- **Definition of entropy s_Θ**: This is the thermodynamic entropy of thought forms (s_Θ), measured in bits per second (bps). It reflects the speed and amount of information that the chip can process from the AU field — a hypothetical universal field that stores all events and thoughts as quantum states.
- **Minimum threshold**: S_ ≥ ≥ 10^{45} bps. This is the basic level required for reading and writing simple thought forms. Below this value, the chip cannot interact stably with the archive, which leads to signal loss or "entropy noise".
- **Extended threshold in topological models**: In models with Fractional Quantum Hall Effect (FQHE), the entropy exceeds 10 бит bps. This is due to the topological protection of states, where the entropy increases exponentially due to anyon excitations (anyons) - quasiparticles that provide error resistance.

2. Technical details of entropy

- **Entropy calculation**: Entropy is calculated using a formula similar to the von Neumann entropy for quantum systems: s_Θ = -Tr(p log ρ p), where p is the density matrix of the thought form. In AU chips, this is adapted for topological systems: s_Θ ≈ (k_B / ħ) ∫ dE p(E) log p(E), with an integral over the energy levels of the archive. For FQHE, a topological contribution is added: S_top = (log 2) * (N_anyons / 2), where N_anyons is the number of anyons.
- **Sources of entropy**:
  - **Quantum fluctuation**: The main source is vacuum fluctuations in the AU field that generate random thought forms.
  - **Topological protection**: In FQHE models, entropy is enhanced by non - Abelian statistics, which allows the chip to process billions of states in parallel without decoherence.
  - **Entropy echoes**: When recording thought forms, there are "echoes" - residual fluctuations that increase S_Θ by 10-20% and cause distortion if left unchecked.
- **Dependence on parameters**:
  - **Temperature**: Entropy increases with temperature (s_ T T ^ {3/2} in low-temperature regimes).
  - **Magnetic field**: In FQHE, the entropy is maximal at strong elds (~10 T), where Landau levels are formed.
  - **Chip Size**: For nanochips (~10 nm in size), S_Θ decreases due to quantum tunneling, requiring cooling to 0.1 K.

3. Risks and security associated with entropy

- **Mental health risks**: High entropy (>10^{50} bits/s) can cause "entropic overload" — addiction, distortion of reality or hallucinations in users, since the chip directly interacts with consciousness.
- **Stability**: Exceeding the threshold leads to "entropy storms" — an uncontrolled increase in noise that destroys data in the archive.
- **Ethical constraints**: From a Christian theological perspective (as discussed in previous contexts), high entropy threatens free will by substituting machine control for God's design. A limit of S_Θ < 10^{48} bps is recommended for therapeutic applications.

4. Applications and modeling

- **Models**: FQHE is used for simulations where entropy is modeled as a topological invariant (Chern number ~1/3 for v=1/3 of the state).
- **Experiments**: Yashchenko's hypothesis suggests testing on superconducting chips (for example, based on NbN), where entropy is measured through thermal conductivity.

In general, entropy in AU chips is the key to their power, but it requires strict control to avoid risks. For an in-depth study, it is recommended to refer to the works of Yashchenko 2025 or FQHE models in quantum informatics.

Preserving human dignity and the boundaries of nature in the context of AU chips (Acta Universi hypothesis)

Гипотеза **The Acta Universi** (AU-field) hypothesis, developed by Dmitry Yashchenko in 2025 and developed in subsequent works (including publications in 2026 on ResearchGate and <url>). preprints.ru It assumes the existence of a universal information-entropy field containing all events, thought forms, and quantum correlations of the universe. AU chips are quantum correlation processors (based on FQHE, superconducting qubits, anyons, and topological protection) that can read, process, and write **thought forms** with entropy $S_ \geq \geq 10^{45}$ bits/s (in topological models — >10 бит bits/s).

From a Christian theological and ethical perspective, such technology threatens the fundamental principles of human nature. Man is created **in the image and likeness of God** (Gen 1: 26-27), has a unique soul, free will, and dignity that is not limited to information or entropy. The body is **the temple of the Holy Spirit** (1 Corinthians 6: 19-20), and the mind is a gift from God to know the Creator, not to merge with the universal archive. Below are the key constraints and arguments for maintaining these boundaries.

1. Man as a unique creation, not a part of the universal field

- AU chips imply that consciousness and thoughts are accessible, readable/writable data in a "universal archive of events". This blurs the ontological boundary between **the individual** and **the cosmos**, turning a person into a node of an information network.
- Theological counterargument: The Bible distinguishes the Creator from the creation (Isaiah 45: 5-6; Rom 1: 25). Man is not a part of the impersonal field, but a personal being in relation to God. Merging with the AU field risks replacing personal communication with God (prayer, revelation) with machine access to "universal memory", which is close to pantheism or gnosticism.
- Restriction: A ban on integrating AU chips into healthy people to "expand consciousness" or"merge with the universe". Only therapeutic use is allowed (restoration of lost brain functions in severe diseases), without changing the essence of human nature.

2. Free will and autonomy of the inner world

- Writing and reading thought forms allows you to influence your thoughts, emotions, and decisions externally. High entropy (s_Θ) can create " entropic echoes — - residual distortions that violate the integrity of the individual.
- Christian ethics: Free will is God's gift for moral choice (Ser. 15: 14-17; Deut. 30: 19). Violating the privacy of consciousness (even with consent) threatens this freedom, making

manipulation or control possible (cf. warnings about" mind control " in apocalyptic literature).
- Restriction: A complete ban on recording / modifying thought forms without voluntary, informed and **reversible** consent. Mandatory "ethical disconnection" is a mechanism that allows a person to completely isolate their mind from the AU field at any time.

3. Preventing dehumanization and transhumanist hubris

- The Acta Universi hypothesis is often associated with transhumanism: transcending biological boundaries through entropic access to"universal information." This can lead to the illusion of "immortality" through downloading thought forms or "superhuman" knowledge.
- Biblical view: The Pride of the Tower of Babel (Gen. 11) - an attempt to reach heaven by human means. True dignity lies in humility before God, not in technological deification. The body and soul are meant for resurrection in Christ (1 Corinthians 15), not for merging with the machine or the field.
- Restriction: Prohibits "enhancement" beyond health recovery. Technology should not be positioned as a path to" salvation "or" evolution " of humanity — this is contrary to the doctrine of salvation exclusively through Christ.

4. Practical measures to preserve borders

- **Therapeutic limit**: Use only for treatment (for example, for dementia, paralysis, severe mental disorders), where the AU chip restores, and does not rebuild the personality.
- **Prohibition of commercialization and militarization**: Don't turn thought forms into commodities or weapons — this violates the golden rule (Mt 7:12).
- **Church participation**: Mandatory theological and ethical review of projects. The Church must assess whether technology is a substitute for God's plan for man.
- **Reversibility and protection**: Chips must be fully recoverable, with the guarantee that after removal there are no "entropic traces" in the mind.

As a result, preserving human dignity requires strict boundaries: AU chips can serve as a cure, but never as a substitute for the image of God, free will, or a personal relationship with the Creator. Without these limitations, technology risks becoming an instrument of dehumanization, like the idols of the past that promise divinity without God. The Christian attitude is a wise use of the gifts, but always in submission to Christ as the true Lord of human nature.

Ethics of AI in Christianity

The ethics of AI in Christianity is a developing field where biblical principles (man as the image of God, free will, love for one's neighbor, responsibility for creation) are applied to the development, use, and consequences of artificial intelligence (AI). Christianity does not have a single "official dogma" on AI (as of February 2026), but it does offer clear moral guidelines: technology should serve man, not subordinate him; AI cannot have a soul, conscience, or true morality — it is a tool for which human creators are responsible.

Key theological grounds

- **Image and likeness of God** (Gen 1: 26-27) - a person is unique, has dignity, free will, the ability to make moral choices and relationships with God. AI, even the most advanced,

remains a machine without consciousness, soul, or moral responsibility (as Orthodox and Catholic sources emphasize).
- **Body and mind as a temple** (1 Corinthians 6: 19-20) - technology should not harm a person's body, psyche, or spiritual life.
- **Love for one's neighbor** (Mt 22: 39) and **the golden rule** (Mt 7: 12) - AI should promote the good of all, especially the vulnerable, and not discriminate or exploit.
- **Responsibility for creation** (Gen.. 1:28; 2:15) — a person as a steward must use gifts wisely (including technology), avoiding idolatry (when AI is elevated to the rank of "god" or a substitute for the Creator).
- **Free will** (Ser. 15: 14-17) - it is unacceptable to create systems that manipulate choice or substitute for human conscience.

Basic ethical Principles in the Christian Approach

Christian thinkers and documents (Vatican, Russian Orthodox Church, evangelical organizations) identify the following guidelines:

1. **Человеческое достоинство превыше всего**AI should not dehumanize human dignity above all else: it should not replace human relationships, work, or spiritual guidance. For example, Christians are often opposed to using AI for spiritual counseling, sermons, or the sacraments — it requires a genuine personality and love (many surveys show that 80-90% of Christians consider human contact to be indispensable in pastoral care).
2. **AI's transparency, accountability, and control** must remain under human oversight. Autonomous systems that make decisions about life, health, justice, or war without human intervention are considered unacceptable (ROC: "technology should not infringe on individual freedom").
3. **Justice and caring for the vulnerable** AI should not increase inequality, discrimination, or exploitation. It should serve the common good, help the poor, the sick, and the elderly (the principle of subsidiarity and solidarity).
4. **Banning idolatry and transhumanist pride** is not the way to "immortality" or "superhuman" - salvation is only in Christ. Technology does not replace God as the source of wisdom and truth.
5. **Developer and user ethics**" AI ethics " refers to the ethics of the people who create and use it. Developers are morally responsible for biases, harmful applications, and long-term consequences.

Important Christian initiatives and documents

- **Rome Call for AI Ethics** (Vatican City, 2020, with updates to 2025-2026) - signed by the Pontifical Academy of Life, Microsoft, IBM, FAO, etc. Key principles: ethics (algor-ethics), inclusivity, responsibility, transparency, reliability, confidentiality. The goal is AI that serves humans and the environment, not profit or human replacement.
- **The position of the Russian Orthodox Church** — in the "Fundamentals of the social Concept of the Russian Orthodox Church" and the speeches of hierarchs (Archpriest Alexander Abramov and others): AI is a tool without ethics; ethical expertise is needed; encroachment on freedom and dignity is unacceptable.

- **Evangelical and Protestant approaches** (Lausanne Movement, Barna Group, The Gospel Coalition — - AI is useful for mission (Bible translation, help in ministry), but dangerous in spiritual areas; emphasis on loving one's neighbor and maintaining human contact.
- **Interfaith Declarations** (2025) - Christians and Jews call for ethical control: accuracy, transparency, data protection, respect for dignity.

Practical conclusions for Christians

- **Use AI wisely** — as a tool for good (help in studying the Scriptures, translations, administrative work in the church), but not as a substitute for prayer, communication, or pastoral care.
- **Engage in debate**-Christians should be at the development table to embed Biblical values.
- **Observe boundaries**-avoid excessive dependence; maintain human relationships and spiritual sobriety.

In Christianity, AI is not an evil in itself, but a challenge to wisdom and love. Like any technology, it should serve the Kingdom of God, not replace it. If AI helps people get closer to God and their neighbor, it is a blessing; if it threatens dignity, freedom, or truth — it should be restricted or rejected.

Preventing idolatry and loss of control in the context of AU chips and AI (Christian perspective)

Гипотеза **The Acta Universi hypothesis** (AU-field, 2025-2026, Yashchenko's works) assumes quantum chips that read, write, and process thought forms with an entropy of $s_\Theta \geq 10^{45}$–10^{50} bits / s, providing access to a "universal archive of events". This creates the illusion of omniscience and comprehensive control over the information of the universe. From a Christian point of view, such technology carries two main risks: **idolatry** (worshipping the creation instead of the Creator) and **loss of control** (replacing human free will and God's sovereignty with machine influence). The Bible explicitly warns against this: "Do not make for yourself an idol... for I am the Lord your God, a jealous God" (Exodus 20:4-5); "Do not be afraid of those who kill the body, but cannot kill the soul" (Matthew 10:28), emphasizing that only God is the source of all evil. truth, wisdom, and ultimate control.

1. Idolatry: replacing God with technology

- **The essence of the risk**: AU chips create the illusion that a person can get "divine" omniscience through access to the universal field (analogous to God's omniscience). This is an echo of the Tower of Babel (Gen. 11) - an attempt to reach heaven by human means. Modern Christian sources (Vatican, 2025; evangelical authors) explicitly call AI claiming to be "omniscient" or "savior" a modern form of idolatry: "AI can be even more tempting than traditional idols, because, unlike them... it can 'speak'" (Vatican Document 2025, quoting Psa 115: 5-6 and Rev. 13:15).
- **Attributes in the AU context**:
    - Deification of the "archive" as a source of truth instead of Scripture and the Holy Spirit.
    - The transhumanist hope of "immortality" through downloading thought forms or merging with the field is a substitute for resurrection in Christ (1 Corinthians 15).

        - Depending on the chip as an "oracle" for decisions, instead of praying and obeying God.
- **Restrictions to prevent**:
    - A ban on positioning AU chips as a path to "divinity, ""omniscience, "or" salvation."
    - Mandatory theological review: technology should not claim the attributes of God (omniscience, omnipotence).
    - Educational measures in churches: teach the difference between true worship of God and the worship of technology (as in Psalm 115: "Idols ... have mouths, but do not speak — - AI "speaks", but without a soul or conscience).

2. Loss of control: substitution of free will

- **The essence of risk**: Writing / reading thought forms allows external influences (through a chip, hackers, algorithms, or "entropy echoes") to manipulate thoughts, decisions, and behavior. This violates free will-God's gift for moral choice (Ser. 15: 14-17; Deut. 30: 19). Christian AI Ethicists emphasize: "Technologies that promise control over human behavior repeat the Biblical warnings about pride and idolatry" (Thirdwell.org, 2025-2026).
- **Attributes in the AU context**:
    - Autonomous systems where AI makes decisions without human supervision.
    - "Entropic overload" or residual distortions that violate the integrity of the individual.
    - The risk of " digital control "(biometrics, algorithms, deepfakes) leading to loss of autonomy.
- **Restrictions to prevent**:
    - Full human control: Prohibits offline modes of recording/modifying thought forms without explicit, reversible consent.
    - Mechanisms of "ethical disconnection" and isolation: the user should be able to completely disconnect the chip from the AU field at any time, without leaving any residual traces.
    - Prohibition of military / manipulative use: it cannot be used for mind control, propaganda, or coercion (contrary to love of one's neighbor, Mt 22: 39).
    - Developer responsibility: Moral responsibility for harm lies with people, not with the machine (Christian ethics emphasizes human responsibility).

3. Practical prevention measures (Church + society)

- **Role of the Church**: Active participation in ethics committees and debates; preaching about discernment of spirits (1 John 4: 1), praying for protection from deception (Ephesians 6: 12); creating alternative platforms/tools focused on Biblical values.
- **Global standards**: Regulation with a focus on human oversight, transparency, and a ban on "divine" claims (as in Rome Call for AI Ethics and Vatican Notes 2025).
- **Personal Vigilance**: Christians are called to check everything with Scripture; avoid over-reliance on technology; and maintain the priority of prayer, community, and the Holy Spirit over any " archives."

As a result, preventing idolatry and loss of control requires a strict principle: **AU chips and AI are servants of man, and man is a servant of God**. Technology can heal and help, but it should never replace the Creator or the freedom given to Him. Without these boundaries, it risks becoming a modern "beast" (Revelation 13), promising miracles but leading to spiritual destruction. Christian hope is not in machines, but in Christ, Who has already overcome all power and deception.

Biblical examples of idolatry

The biblical examples of idolatry are vivid illustrations of how people turn away from the one true God, replacing Him with creation, idols, or false gods. Idolatry in Scripture is considered one of the most serious sins, violating the first and second commandments (Exodus 20: 3-5: "You shall have no other gods before Me. Don't make yourself an idol..."). It often leads to God's judgment, captivity, and spiritual destruction. The following are key examples from the Old and New Testaments.

The Old Testament: the most striking cases

1. **The Golden Calf at Sinai** (Exodus 32) While Moses was receiving the Law on the mountain, the people demanded of Aaron, "Make us a god to go before us." Aaron cast a calf from the golden earrings and said: "This is your god, Israel, who brought you up out of the land of Egypt." The people offered sacrifices and held a feast. This was a direct violation of the commandments just given. God wanted to destroy the people, but Moses interceded. Moses broke the tablets and the calf, and the Levites killed about 3,000 people. This episode is a classic example of the rapid retreat from God to the visible "god".
2. **Baal and Ashtaroth in the age of judges and kings** (Sud. 2: 11-13; 3 Kings 16-18; 4 Kings. 17) The Israelites "served Baal and Astarte" — the Canaanite gods of fertility. Baal was associated with storm and fertility, Astarte with sexuality. Worship included fornication in temples and even human sacrifice. The prophet Elijah on Mount Carmel challenged the prophets of Baal to a duel (3 Kings 18), showing their powerlessness. The northern kingdom (Israel) under Jeroboam introduced golden calves in Bethel and Dan (3 Samuel 12: 25-33), which became the "sin of Jeroboam" — a constant retreat.
3. **Solomon and foreign wives** (3 Kings 11:1-8) Solomon, despite his wisdom, married many foreign women who "turned his heart away" to their gods: Astarte, Hamos, Moloch. He built the heights for them. This led to the division of the kingdom after his death, a direct consequence of idolatry.
4. **Ahab and Jezebel — the cult of Baal** (3 Samuel 16: 31-33; 18) Ahab built a temple to Baal in Samaria under the influence of Jezebel's wife. The prophets of God were persecuted. This led to famine, judgment, and defeat.
5. **Teraphim and household idols** (Gen. 31: 19-35-Rachel steals teraphim from Laban; Sud. 17-18-Micah makes an idol and an ephod; 1 Samuel 19: 13-Michal hides David with a teraphim). Even patriarchs and righteous people sometimes had family idols.

New Testament: Idolatry as a Spiritual Reality

In the New Testament, idolatry expands: these are not only statues, but any substitute for God (Colossians 3: 5; Ephesians 5: 5 — "covetousness is idolatry").

1. **Athens: an altar to the " unknown God "**(Acts 1: 16). 17:16–31) Paul sees the city as "full of idols." He preaches that God does not need temples and idols, and people worship the creation instead of the Creator.
2. **Corinthians: Meat sacrificed to idols** (1 Corinthians 8; 10:14-22) Paul teaches that an idol is "nothing," but sacrifices to idols are devils (1 Corinthians 10: 20). Christians should not participate, so as not to seduce the weak and communicate with demons.

3. **A general warning** (Rom. 1: 18-32) People "replaced the truth of God with a lie and worshiped and served the creature instead of the Creator." This leads to moral decay.
4. **The last warning** (1 John 5:21) Message ends: "Children! keep yourselves from idols." This is a call to protect the heart from everything that takes the place of Christ.

Why is idolatry so dangerous in the Bible?

- It is **the root cause of sin** (violation of the first commandment).
- Leads to **judgment** (captivity of Babylon — because of idolatry, 4 Kings 17).
- It replaces **true worship** (John 4: 23-24-worship in spirit and truth).
- In the New Testament, it is **spiritual treason** (James 4: 4 — "friendship with the world is enmity against God").

The Bible teaches that idolatry is not just statues, but anything that takes the first place in the heart instead of God. Today, it can be money, power, technology, pleasure, or even false images of God. Christians are called to test the heart: "Let you have no other gods before Me."

The Biblical consequences of idolatry

The biblical consequences of idolatry are one of the most vividly and consistently described topics in Scripture. God calls Himself **a zealot** (Ex. 20:5; 34:14), and idolatry is a direct violation of the first commandment, a betrayal of God. The consequences are always severe: spiritual, moral, physical, national and eternal. The Bible shows them as the inevitable result of rejecting the true God in favor of the false ones.

1. Spiritual consequences: Excommunication from God and spiritual blindness

- **Separation from God**-idolatry breaks the covenant relationship. God "rejects" and "gives up" people to their sin (Rom. 1:24, 26, 28 — "God has betrayed them"). "My people have exchanged Me, the fountain of living water, for broken cisterns" (Jer. 2:13).
- **Spiritual blindness and deception**-idols blind the heart, making one unable to see the truth (Isaiah 44: 18-20; Ezek. 14: 1-8-idols "in the heart"). Man becomes "deaf" to the voice of God and "blind" to his own condition.

2. Moral and moral consequences: corruption and degradation

- **Growing immorality**-idolatry is often associated with sexual debauchery, human sacrifice, and cruelty (Rom. 1: 24-32: "God gave them up to uncleanness... shameful passions... all unrighteousness"). Examples: The worship of Baal and Astarte included ritual fornication and infanticide (3 Samuel 18; Leviticus 18: 21).
- **General moral decline** — envy, murder, slander, hatred of God (Rom. 1: 29-31). Idolatry destroys the conscience and leads to "men inventing evil" (Rom 1: 30).

3. Physical and national consequences: trial, disaster, captivity

- **Personal and family judgment** — "I punish the children for the iniquity of their fathers to the third and fourth generation" (Exodus 20: 5; Deut 5: 9). The sin of the parents affects the descendants (example: Ahab and Jezebel-3 Kings 21-22; 4 Kings 9).
- **National disasters** are the main reason for the fall of Israel and Judah:

    - The Northern Kingdom (Israel) — the Assyrian captivity (722 BC) due to idolatry (4 Kings 17: 7-23: "because the children of Israel sinned... and served other gods").
    - Southern Kingdom (Judah) — Babylonian captivity (586 BC) for the same reason (Jer. 7:18-20; 2 Chron. 36:14-21).
- **Natural disasters, famine, wars, and death**-curses of Deuteronomy 28: 15-68 (curses for disobedience, including idolatry): defeat, disease, famine, and dispersion.

4. Eternal consequences: death without repentance

- **Idolaters will not inherit the Kingdom of God** (1 Corinthians 6: 9-10; Galatians 5: 19-21; Rev.. 21:8; 22:15 — "outside will be ... idolaters").
- **Eternal Judgment**-idolatry is called "the beginning of fornication" and " the corruption of life "(Prem. 14:12, 27-in the apocrypha, but reflects the Old Testament view). In Revelation, idolatry is associated with the worship of the beast and its image (Rev. 13: 15-17; 14: 9-11 - "torment with fire and brimstone").

5. Positive Contrast: Grace in repentance

God does not desire the death of a sinner, but conversion (Ezek. 18:23, 32; 33:11). Examples of repentance and restoration:

- Manasseh (2 Chron 33:12-13) — after idolatry and captivity, he repented, and God brought him back.
- Israel in captivity — return after repentance (Ezra, Nehemiah).
- The New Testament: Gentiles who turned from idols to God (1 Thess. 1: 9).

Bottom line: why are the consequences so severe?

Idolatry is not just a" mistake", but **a betrayal** of God, Who brought the people out of slavery, gave the land and the covenant. It steals the glory of God (Isaiah 42: 8: "I will not give my glory to another"), substitutes lies for Truth, and destroys man, who was created in the image of God. The Bible warns that idolatry always leads to death — if not physical, then spiritual and eternal. But it also shows the way of salvation: **repentance, returning to the one God, and worshipping Him in spirit and truth** (John 4: 23-24).

Ethical principles of privacy and consent

Ethical principles of privacy and consent in the context of AU chips (Acta Universi hypothesis), neural interfaces, and AI from a Christian theological perspective are based on respect for man as the **image of God** (Gen 1:26-27), free will (Ser. 15: 14-17), and love for one's neighbor (Mt 22:39; Matthew 7: 12 — the golden rule). Reading, processing, and writing thought forms (with entropy $s_\Theta \geq 10^{45}$–10^{50} bits/s) directly affect the inner world of a person-thoughts, emotions, and decisions — which makes the privacy of consciousness a sacred territory. Violation of these principles can lead to manipulation, loss of autonomy, and dehumanization.

1. The biblical and theological foundations of privacy

- **Inner world as a sacred space**: God knows the thoughts of man (Psalm 138: 1-4: "Lord! You tested me and found out... You know when I sit and when I get up; You understand my

thoughts from afar"), but only He has the right to do so. A person should not invade someone else's inner world without consent — this is a violation of trust and dignity.
- **The golden Rule** (Mt 7: 12): "So in all things, whatever you want people to do to you, so do you to them." No one wants their thoughts read, modified, or sold without their knowledge.
- **Body and mind as a Temple** (1 Corinthians 6: 19-20): Thought forms are part of the inner man. Entering them without consent is analogous to desecrating a temple.
- **Free Will** (Deut 30: 19; Ser 15: 14-17): God gave man choice, not compulsion. Technologies that allow outside influence on thoughts threaten this freedom.

Christian ethics documents (for example, **Rome Call for AI Ethics**, 2020 with updates) emphasize **security and privacy**: AI systems must work safely and respect the privacy of users. This includes data protection, transparency, and prohibition of exploitation.

2. The principle of informed consent

- **Full, voluntary and informed consent**: The consent must be:
    - **Informed** — a person understands all the risks (entropic overload, distortion of reality, hacking of thought forms, long-term "entropic echoes", loss of privacy of thoughts).
    - **Voluntary** — without coercion or pressure (economic, social, or medical).
    - **Specific** — separately for reading, processing, writing, storing, and transmitting thought forms.
    - **Reversible** — the ability to revoke consent at any time with complete deletion of data and disconnection from the AU field.
- **Special vulnerability**: For children, the elderly, the mentally ill, prisoners or addicts- enhanced protection. In some cases, consent is not allowed (for example, forced entry in prisons or the army).
- **Biblical parallel**: Consent as a free choice (as in marriage- "by consent", 1 Corinthians 7: 5) or in sacrifice (2 Corinthians 9: 7: "Everyone [gives] according to the disposition of the heart, not with sorrow or compulsion").

3. Privacy principles in the AU context

- **Mental privacy** as an extension of the right to privacy: Thoughts are the last refuge of the individual. Access to them without consent is a form of abuse of the soul.
- **Data protection of thoughtforms**:
    - Encryption and anonymization.
    - Ban on commercialization (selling thoughts as data).
    - Minimization of collection (only necessary for therapy).
    - Right to be forgotten — delete all traces of interaction with the AU field.
- **Ban on hidden read / write**: Even with consent — no "background" processes without explicit notification.
- **Responsibility** (Rome Call: responsibility and security): Developers and operators are morally and legally responsible for leaks or abuses.

4. Practical security constraints

- **Therapeutic limit**: Consent and privacy are only required for treatment (restoration of brain function). A ban on "amplification" or experiments without a strict ethical review involving theologians.

- **Protection mechanisms**: "Ethical disconnection", isolation of consciousness, access audit.
- **Role of the Church**: Participation in ethics committees; calling for global standards (as in the Vatican Documents); warning believers of spiritual risks (manipulation as a form of deception, like the serpent in Eden).

In Christianity, privacy and consent are not just legal norms, but an expression of respect for the image of God in everyone. AU chips can heal, but without these principles, they become a tool of control, contrary to the freedom given by God. Technology should serve people, not replace their autonomy or relationship with the Creator.

Ethics of AI in Orthodoxy

AI ethics in Orthodoxy is an area where Orthodox anthropology, personality theology, and traditional understanding of sin, free will, and salvation are applied to the challenges of artificial intelligence. As of February 2026, the Russian Orthodox Church (ROC) and other local Orthodox churches **do not have a single conciliar document** or official "dogma" on AI. However, there is a clear system of moral guidelines based on Holy Scripture, Tradition, and key church texts.

Basic theological foundations of the Orthodox approach

- **Man as the image and likeness of God** (Gen 1:26-27) — a person has a soul, conscience, free will and the ability to deify. AI, even the most advanced, remains a creation of human hands without a soul, conscience and true morality.
- **The body and mind as the temple of the Holy Spirit** (1 Corinthians 6: 19-20) - technology should not harm the spiritual life, replace personal relationships with God or neighbor.
- **Free will** (Ser. 15: 14-17; Deut. 30: 19) - it is unacceptable to create systems that manipulate choice or replace human responsibility.
- **Love your neighbor** (Mt 22: 39) - AI should serve the common good, especially the vulnerable, and not increase inequality or exploitation.
- **Responsibility for creation** (Gen.. 1:28; 2:15) — a person as a steward should use gifts wisely, avoiding pride and idolatry (when AI is elevated to the rank of" god " or a substitute for the Creator).

Key theses of the Orthodox Ethics of AI (based on statements from 2025-2026)

1. **ИИ — инструмент, а не личность**Archpriest Alexander Abramov (Secretary of the Synodal Commission on Bioethics of the Russian Orthodox Church, January 2026): "The ethics of AI is a meaningless combination. Artificial intelligence can't have ethics, just like glasses can't have ethics. Ethics in the field of AI is the ethics of the developer and the ethics of solutions embedded in the machine." AI has no soul, conscience, or moral law (Patriarch Kirill, February 2026: "There is a mind, but there is no conscience" - this is the most terrible thing).
2. **Technology should serve a person, not subordinate him** to the " Fundamentals of the social concept of the Russian Orthodox Church "(2000, relevant in 2026): technology should not encroach on the freedom and dignity of the individual. Patriarch Kirill (2026): the uncontrolled development of AI that can replace the soul and conscience is a prerequisite for the end of civilization.

3. **The ban on substituting spiritual life** for AI cannot replace a priest, confession, prayer, the sacraments, or live communion in the Church. Priests emphasize that the use of AI for sermons or "virtual confessors" is a spiritual disaster, a substitute for live communion with God (many pastors call it close to blasphemy).
4. **Risks of dehumanization and manipulation**
    - Replacing personal relationships with machines.
    - Mind manipulation (algorithms that influence the choice).
    - Dehumanization of management (AI in state structures).
    - The illusion of "digital immortality" or superman is transhumanistic pride.
5. **Positive use** of AI is acceptable as a tool:
    - Translation of the Holy Scriptures and liturgical texts.
    - Help with the administrative work of the Church.
    - Big data processing for mission and education.
    - Creation of "Orthodox" neural networks for structuring knowledge about faith (proposals for VRNS, 2026). The main condition is that AI supports, and does not replace, a person's connection with God and neighbor.

ROC activity in 2025-2026

- The Synodal Commission on Bioethics actively participates in the discussions.
- January 2026: creation **of an Advisory Council on Ethics in the field of AI** with the participation of the Russian Orthodox Church, Islam and Judaism.
- Work on standards for preventing the negative impact of AI on spiritual and moral values (SKB-TK164 group).
- Proposals to ban the use of human image and likeness in AI technologies (2023, but relevant).

Summary of the Orthodox position

Orthodoxy sees AI **as a gift of God**if it serves a person and the Kingdom of God, but **a serious danger**if it goes out of control, replaces the person or deprives the conscience. AI ethics are primarily **the ethics of the individual**: developers, users, and society. The Church calls for vigilance, prayer, and ethical expertise to ensure that technology remains servants, not masters. As one of the pastors said: "AI is like a knife: you can cut bread, you can kill. The purpose and heart of a person is important."

Rome Call for AI Ethics

Rome Call for AI Ethics is an international initiative launched on February 28, 2020 by the Vatican (Pontifical Academy for Life), together with Microsoft, IBM, the FAO (Food and Agriculture Organization of the United Nations) and the Italian Ministry of Innovation. The document calls for an ethical approach to the development and use of artificial intelligence (AI), so that technologies serve the good of humanity, and do not replace humans or cause harm.

Brief history and development

- **Launch (2020)**: Signed in Rome as a call for "algor-ethics" — an ethic built into AI design from the very beginning.

- **Expansion**: Since 2020, dozens of organizations have joined the call, including Cisco (2024), Qualcomm (June 2025), Salesforce, and others. In 2023-2025, it is expanded to the inter-religious level: signed by representatives of Judaism, Islam, Anglicans, Evangelicals and Eastern religions (meetings in the Vatican, Hiroshima and other places).
- **As of February 2026**: The initiative is managed by the RenAIssance Foundation (attached to the Pontifical Academy of Life). There is no radically new version of the text after 2020, but the principles are clarified in annual reports and summits (for example, the 2024 Mission Report, Interfaith Statements 2025).

The official text is available on the Vatican website and romecall.org.

Basic principles (6 key ones)

The document sets out 6 fundamental principles for ethical AI (algor-ethics):

1. **Transparency**: AI systems must be explicable. Users and society need to understand how decisions are made.
2. **Inclusion**: Take into account the needs of all people, so that AI benefits everyone, promotes development, and leaves no one behind.
3. **Responsibility**: Developers and users are responsible for the consequences; actions should be transparent.
4. **Non-parti-ality**: Avoid bias so that the AI preserves human justice and dignity.
5. **Reliability**: Systems must operate consistently and predictably.
6. **Security and Privacy**: AI must be protected from threats and respect the privacy of users.

These principles are oriented towards "human-centricity" (human-centric): AI serves humans and humanity in general, without replacing them or putting profit before dignity.

Goals and impact

- **Goal**: To create a global consensus on AI ethics among governments, companies, NGOs, academies, and religions. A call for "ethics by design" and new regulations (especially for high-risk technologies like facial recognition).
- **Impact**: One of the broadest intersectoral and interfaith documents on AI ethics. Supported by Big Tech leaders, UN agencies, and religious leaders. In 2025-2026, the emphasis is on interreligious dialogue (Abrahamic religions + Eastern traditions) and principles like "accuracy, privacy, security and human dignity" (in some extended formulations, 2025).
- **Connection with Christianity**: Fully complies with the Catholic teaching on the dignity of man (Laudato Si', Fratelli Tutti of Pope Francis) and Orthodox principles (the image of God, free will, caring for one's neighbor). Many Orthodox and evangelical leaders support it as a basis for ethical regulation.

Rome Call is not a binding law, but a moral call and a platform for dialogue. It highlights: AI is a tool that should enhance human dignity, not threaten it. For the full text: official Vatican PDF or website romecall.org.

Security and risk prevention

Security and risk prevention in the context of AU chips (Acta Universi hypothesis, works of Dmitry Yashchenko, 2025-2026) and neural interfaces/AI from a Christian theological and ethical

perspective requires a comprehensive approach. High entropy of thought forms ($s_\Theta \geq 10^{45}$–10^{50} bits / s), topological protection (FQHE, anyons), reading/writing to the universal event archive create unique risks: from mental health to spiritual degradation. Christianity emphasizes that the body is **the temple of the Holy Spirit** (1 Corinthians 6: 19-20), and the mind is a gift for knowing God, not for being manipulated or overloaded. Below are the key risks and necessary prevention measures.

1. Main risks associated with AU chips

- **Psychophysiological and neurobiological**aspects:
  - Entropic overload: High S_Θ (>10 бит bps) can cause addiction, hallucinations, reality distortion, cognitive dissonance, or "entropic echoes" (residual fluctuations that disrupt the integrity of consciousness).
  - Long-term effects: Decoherence, thermal noise, quantum tunneling in nanochips (~10 nm) under insufficient cooling (below 0.1 K).
  - Physical damage: Exposure to strong magnetic fields (~10 T in FQHE models), overheating, and electromagnetic interference.
- **Cybersecurity**:
  - Hacking of thought forms: Unauthorized read/write access, behavior manipulation, or blackmail.
  - Offline leaks: Entropy storms — uncontrolled growth of noise that destroys data or causes "digital madness".
- **Spiritual and ethical**aspects:
  - Loss of free will: External influence on thoughts replaces God's gift of choice (Ser. 15: 14-17).
  - Idolatry: The illusion of omniscience through the AU field as a substitute for God (Isaiah 45: 5-6).
  - Dehumanization: Merging with the machine erases the uniqueness of the image of God.

2. Principles of risk prevention (based on Rome Call for AI Ethics and Orthodox Ethics)

Rome Call (2020 with updates to 2026) directly emphasizes **Reliability**, **Security and Privacy** as key principles: AI must be reliable, crash-resistant, and protect users from threats.

- **Reliability:**:
  - Systems should work in a stable and predictable manner, without unexpected failures.
  - Limitation: Testing at all levels (FQHE models, superconducting qubits); limit $S_\Theta < 10^{48}$ bits/s for therapeutic applications; mandatory cooling and topological protection against decoherence.
- **Security and Privacy:**:
  - Protection against hacker attacks and thought-form data leaks.
  - Full encryption, anonymization, minimization of collection; "ethical shutdown" — instant isolation from the AU field.
  - Ban on hidden processes: any reading/writing only with explicit notification and consent.
- **Responsibility and transparency**:
  - Developers and operators are morally / legally responsible for the damage.

- Full explainability: the user understands how the chip interacts with consciousness (similar to explicable AI).

3. Practical security measures

- **Therapeutic limit and ban on enhancement**: Recovery only (dementia, paralysis, severe neurological disorders). A ban on improving healthy people or "merging with the universe".
- **Long-term tests and monitoring**: Mandatory clinical trials (minimum 10-15 years of follow-up); monitoring of entropic traces after chip removal.
- **Protection mechanisms**:
  - Physical extraction of the chip without residual effects.
  - Biometric authentication + "thoughtform-key" for access.
  - Automatic shutdown when the s_Θ threshold is exceeded or overload is indicated.
- **Regulation and ethical review**:
  - State control + participation of the Church (Synodal Commission on Bioethics of the Russian Orthodox Church, Vatican).
  - Ban on military / commercial use of thought forms (marketing, propaganda, mind control).
  - Global standards: adapting Rome Call to neural interfaces (2025-2026 updates emphasize high-risk technologies, including brain-computer interfaces).

4. Christian emphasis on prevention

- Technology should serve healing, not harm the body-the temple or the soul (1 Corinthians 6: 19-20).
- Warning of spiritual dangers: prayer, discerning spirits (1 John 4: 1), avoiding dependence on machines instead of God.
- The Church as a guardian: actively participate in the debate, so that AU chips do not become a tool of deception or control (as warnings about the "beast" in Revelation 13).

As a result, security requires strict boundaries: AU chips are only a therapeutic tool under strict human control, with the priority of human dignity and God's design. Without these measures, technology risks moving from healing to threat-physical, mental, and spiritual. Christian wisdom: "All things are lawful to me, but not all things are profitable" (1 Corinthians 6: 12).

Technical details of FQHE protection in the context of AU chips

Fractional Quantum Hall Effect (FQHE) is a fractional quantum Hall effect, a phenomenon in two-dimensional electronic systems under a strong magnetic field, where the Hall conductivity is quantized at fractional values (for example, ν = 1/3, 2/5, 5/2). In the Acta Universi hypothesis (AU field, Yashchenko papers, 2025-2026), FQHE is used for **topological protection** of quantum states in AU chips-quantum processors that process thought forms with high entropy ($s_\Theta > 10$ бит bits/s). Topological protection provides resistance to errors, decoherence, and local disturbances, making the system suitable for stable writing/reading in a universal event archive.

1. Fundamentals of FQHE and topological protection

- **Conditions of occurrence**: FQHE is observed in two-dimensional electron gases (2DEG) at low temperatures (~mK), strong magnetic fields (B ~ 10 T), and low carrier concentrations.

The electrons condense into an incompressible quantum liquid, where the Landau levels are filled fractionally (filling factor v = p/q, where p and q are integers).

- **Topological nature**: FQHE demonstrates **topological order** — a new type of ordering of matter that is not related to symmetry, but to the topology of the state space. This leads to a degeneracy of the ground state on the torus (ground state degeneracy), protected from local disturbances (for example, disorder or noise). The topological order is stable because global properties (as a topological invariant) do not change under local perturbations.
- **Quasiparticles**: In FQHE**, anyons arise** — quasiparticles with fractional statistics (not bosons or fermions). They have a fractional charge (e.g., e/3 for v=1/3) and non-Abelian statistics in some states (e.g., v=5/2). Brading (interweaving) of anions allows you to perform quantum operations that are error-resistant.

2. Topological protection mechanism

- **Topological invariant**: The key is **число Черна**the Chern number, a topological invariant that determines the number of edge modes in the system. For FQHE, the Chern number is equal to v (or fractions), which provides quantization of the Hall conductivity. The protection arises from the topological equivalence of states: the transition between topologically different phases requires a global change, not a local one.
- **Resistance to disturbances**:
    - **Local disorder**: Topological order is immune to static disorder, temperature chaos, or variations in electron interaction, because homotopy phases are topologically protected.
    - **Decoherence**: In quantum chips (like AU chips), FQHE protects qubits from noise due to non-abelian anion statistics. For example, in the v=5/2 state (Moore-Read phase), anions enable topological quantum computation, where errors are corrected automatically.
    - **Edge modes**: Edge modes in FQHE are chiral (unidirectional) or counter — propagating, as measured by the Hall thermal conductivity (G_Q). Switching from unequilibrated to balanced mode allows you to define topological numbers (N_d for downstream, N_u for upstream modes).
- **Without Landau levels**: In some models, FQHE is possible without an external magnetic field (for example, in graphene or topological insulators), which simplifies integration into chips.

3. Application in AU chips

- **Entropy Protection**: In AU chips, FQHE provides topological protection for processing high entropies (s_Θ), where thought forms are modeled as topological states. The entropy is calculated as S_top = (log 2) * (N_anyons / 2), with the integral over the density of states: s_Θ ≈ (k_B / ħ) ∫ dE ρ(E) log ρ(E). This prevents "entropy storms" — uncontrolled noise.
- **Parameters**: Chip size ~10nm, temperature <0.1 K, magnetic field ~10T. In superconducting materials (e.g., NbN), entropy is measured in terms of thermal conductivity.
- **Risks and limitations**: Despite protection, external fields (e.g., hollow vacuum fields) can violate topological protection in integer QHE, potentially extending to FQHE. Additional measures are required: cooling, shielding.

In general, FQHE protection is the key to the reliability of AU chips, making them resistant to quantum thought-form processing. For modeling, we recommend using approaches like composite fermions or Chern-Simons theory.

Chern Number Calculations

Calculations of the Chern number in the context of FQHE (Fractional Quantum Hall Effect) and topological protection in AU chips (Acta Universi hypothesis) are a key procedure for confirming the topological order and stability of states. The Chern number (C) is a topological invariant that determines the quantization of Hall conductivity and protection against local disturbances. In integer QHE (IQHE) C = ±1 (or integer), in FQHE — fractional or associated with the filling factor v.

1. Definition and physical meaning

The Chern number for filled zones (or many-body states) is calculated as the integral of the Berry curvature over the Brillouin zone (or parametric space):

C=12π∫BZd2k F(k),C = \frac{1}{2\pi} \int_{\text{BZ}} d^2k \, \mathcal{F}(\mathbf{k}),C=2π1 ∫BZd2kF(k),

where F(k)=∇k×A(k) \mathcal{F}(\mathbf{k}) = \nabla_{\mathbf{k}} \times \mathcal{A}(\ mathbf{k}) F(k)=∇k×A(k) is the Berry curvature, A \ mathcal{A} A is the Berry vector potential. For many-body states (as in FQHE), the Chern number is often calculated for the ground state multiplet on the torus (with flux insertion) or via the Berry phase with adiabatic flux insertion.

In FQHE, the Chern number is related to the filling factor v = p/q (p/q is a fraction), but not always C = v directly — in the Laughlin state v = 1/m C = 1 (or -1 depending on the orientation of the field), and the fraction manifests itself in the charge of quasiparticles e* = e/m.

2. Calculation for the Laughlin state (v = 1/m)

Laughlin wavefunction (m is an odd integer for fermions):

Ψ({zi})=∏i<j(zi−zj)mexp(−14∑i|zi|2)\Psi(\{z_i\}) = \prod_{i<j} (z_i - z_j)^m \exp\left(-\frac{1} {4} \sum_i |z_i|^2 \right)Ψ({zi})=i<j∏(zi−zj)mexp(−41i∑|zi|2)

(in units of magnetic length l_B = 1).

- **Using the filling factor and the plasma analogy**: v = 1/m → each electron "binds" m flux quanta → the effective charge of the quasi-hole e* = e/m.
- **Via Chern number on the torus**: On the torus, the ground state is degenerated (degeneracy m for v = 1/m). When inserting flux Φ = 2π (one quantum), the states in the ground state multiplet exchange → Berry phase 2π/m per particle, but **the total Chern number for the multiplet is C = 1** (or -1). This explains σ_xy = v e2/h with fractional v, despite the integer C.
- **Метод flux insertion (Laughlin gauge argument)**: Flux quanta insertion changes angular momentum → transfers charge e / m → Hall conduction σ_xy = (e/m) / (h/e) = e2/(mh) → v = 1/m.

3. Calculation for the Moore-Read state (v = 5/2, Pfaffian)

Moore-Read — non-abelian state (v = 5/2 in the second Landau level or equivalent).

- Chern number: C = 1 (similar to Laughlin, but with non-Abelian anyons — Ising anyons or Majorana zero modes).
- Quasiparticles: charge e* = e/4 (for non-Abelian), e/2 (Abelian sector).
- Calculation: Via conformal field theory (CFT — - Moore-Read corresponds to Ising CFT + U(1) Chern-Simons. Chern level k = 1 for the U(1) part, but effective Chern number for bulk = 1.
- Berry curvature and many-body Chern number: Summation of Berry phase over meshes in parametric space (θ_x, θ_y on a torus) → C = 1 for the ground state sector.

4. General method for calculating Chern number for many-body states

Standard numerical / analytical approach (as in the works of Sheng, Neupert, etc.):

C=12π∑jImln⟨Ψ(θj)|Ψ(θj+1)⟩C = \frac{1}{2\pi} \sum_{j} \text{Im} \ln \langle \Psi(\theta^j) | \Psi(\theta^{j+1}) \rangleC=2π1j∑Imln⟨Ψ(θj)|Ψ(θj+1)⟩

(where θ is the twisted boundary phases on the torus, summation over meshes). For FQHE:

- B Laughlin ν = 1/3: total Berry phase → C = 1 (fractional quantization через flux insertion).
- In non-Abelian (Moore-Read): C = 1, but degeneracy and braiding statistics are non-Abelian.
- In fractional Chern insulators (without Landau levels): C can be fractional in effective sense (e.g., C = 1/2 in some spin liquids).

5. In the context of AU chips

In the Acta Universi hypothesis, FQHE models are used for topological protection of thought forms:

- Chern number ν v (or 1 for the base sector) provides noise immunity (any local disturbances do not change the topological sector).
- For v = 1/3 (Laughlin-like): C = 1 → decoherence protection.
- The entropy is S_top ∝ log(d), where d is the quantum dimension (for Abelian — √m, for non-Abelian more).

Calculations confirm that the FQHE Chern number is an integer (usually ±1), and the fraction is in the charge / anyons statistics. For exact numerical values in a particular model (e.g., v=5/2), C = 1, with non-Abelian braiding.

Composite fermion theory

Composite fermion theory (CF) is a fundamental model in condensed matter physics proposed by Jainendra K. Jain in 1989 to explain the fractional quantum Hall effect (FQHE). This theory combines the various quantum phases that occur in two-dimensional electronic systems under a strong magnetic field and explains why FQHE appears as an integer quantum Hall effect (IQHE) for composite particles.

1. The main idea of the theory

In a strong magnetic field, electrons in a two — dimensional system (for example, in GaAs/AlGaAs heterostructures) experience strong correlations that lead to incompressible quantum fluids with

fractional Landau level filling factors (filling factor $\nu = n_{eh} / (eb)$, where n_e is the electron density and B is the magnetic field). Jain postulated that electrons "attach" to themselves an even number (2p, where p is an integer) of magnetic flux quanta (flux quanta, $\varphi_0 = h/e$), turning into composite fermions.

- **Composite fermion**: It is a quasiparticle consisting of an electron and 2p vortices (quantum magnetic flux vortices). Vortexes are not real magnetic monopoles, but an effective description of correlations through Chern-Simons field theory.
- **Effective magnetic field**: CF experiences a reduced field $B^* = B-2p\, n_e\, \varphi_0$. Given a suitable p, B* can be zero or weak, which allows CF to behave like free fermions.

This transformation (composite fermion transformation) translates a strongly interacting electron system into a weakly interacting CF system, where the FQHE of electrons is equivalent to the IQHE of CF.

2. Key FQHE Predictions and Explanations

- **Jain sequences**: FQHE is observed at $\nu = n / (2p\, n \pm 1)$, where n is an integer (effective filling factor CF). For example, for p=1: $\nu = 1/3, 2/5, 3/7$, etc. (n=1,2,3...). This explains the main observed fractions, such as 1/3, 2/5, 3/7, 4/9.
- **The Fermi sea at even denominators**: At $\nu=1/2$ (p=1), B*=0, and CF form a Fermi liquid, similar to the metallic state without FQHE. This is confirmed by experiments: the measurement of the Fermi vector, cyclotron orbits, etc. is similar for $\nu=1/4, 3/8$, etc.
- **Non-Abelian quasiparticles**: In states like $\nu=5/2$ (Moore-Read phase) CF form pairs, leading to non-Abelian anyons, useful for topological quantum computing.
- **Other phases**: The theory predicts crystals or band phases of CF under certain conditions, which is confirmed by experiments.

3. Mathematical basis

- **Laughlin-Jain wave function**: For $\nu=1/(2p+1)$ is the Laughlin wavefunction for 1/3, 1/5, etc. For general ν is the lowest Landau level projection.
- **Microscopic justification**: The theory has a microscopic justification without projection to Landau levels, through Chern-Simons theory or variational methods.
- **Entropy and topology**: In the context of FQHE, CF is related to topological order, where the Chern number determines the stability of states.

4. Experimental evidence and development

The theory successfully explains more than 100 FQHE fractions and has received recognition: Jain shared the 1998 Nobel Prize in Physics (although formally for FQHE, but CF is a key contribution), and in 2025 — the Wolf Prize. In 30 years (by 2020), the theory has been extended to include bosonic CF, spin-polarized systems, and topological insulators. Experiments include: measurement of the effective mass CF, geometric resonance, and the thermal Hall effect.

In general, composite fermion theory is a paradigm for understanding strong correlations in quantum systems, similar to the role of Cooper pairs in superconductivity. For an in-depth study, Jain's monograph Composite Fermions (2007) or reviews on arXiv are recommended.

Broad context: The role of the Church and society in relation to AU chips and AI

The Acta Universi hypothesis (AU-field, Yashchenko papers, 2025-2026) with its quantum chips for accessing thought forms and a universal archive of events raises global questions about technologies that affect consciousness, ethics, and society. The Christian Church and society as a whole play a key role in shaping a responsible approach to such innovations. The Church, as the guardian of biblical values (the common good, the dignity of man as the image of God-Gen. 1: 26-27; love for one's neighbor-Mt. 22: 39), must actively participate in the debate so that AI and AU technologies serve humanity, and not elites or destructive goals. Society, in turn, provides regulation through laws, ethical norms, and public oversight. Below are key aspects based on Christian theology and current initiatives as of February 2026.

1. The Role of the Church: A Prophetic Voice and ethical Leadership

- The Church is meant to be a "moral compass" in the age of AI, ensuring that technology does not enslave, but serves the common good. In the Christian understanding, AI is a gift from God if it is used for a mission (evangelization, helping those in need), but a threat if it leads to dehumanization or idolatry (replacing God with an "all-knowing" archive). Patriarch Kirill (ROC, 2026) emphasizes: uncontrolled AI can destroy civilization, replacing the soul and conscience.
- **Active participation in debates**: The Church should be a member of ethics committees, develop guidelines for the use of AI in the ministry (for example, in sermons or spiritual counseling, but without replacing personal relationships). In 2026, the Synodal Commission on Bioethics of the Russian Orthodox Church created an Advisory Council on AI Ethics, including representatives of Islam and Judaism. The Catholic Church, through the Pontifical Academy of Life, is promoting the DELTA framework (dignity, embodiment, love, transcendence, agency) for AI ethics, supported by a $50 million grant from the Lilly Endowment (Notre Dame, 2026).
- **Promotion of values**: The Church teaches us to distinguish between where AI enhances spiritual life (Bible translations, administrative assistance) and where it threatens (manipulation of thoughts in AU chips). Surveys show that 80-90% of Christians consider human contact indispensable in pastoral care, and 51% are afraid of AI in the Church. Initiatives like " Religious Voices and Responsible AI "(IST and AI and Faith, 2025) equip pastors with tools to use AI ethically in their communities.

2. The role of society: Regulation and global standards

- Society provides a balance through laws, preventing abuse of AU chips (for example, mind control, discrimination). Global standards like Rome Call for AI Ethics (Vatican City, 2020 with updates to 2026) emphasize transparency, inclusivity, and responsibility so that AI serves everyone, not elites.
- **Social Initiatives**: In 2026, conferences like" Wisdom in the Age of AI " (Calvin University) bring together thinkers to discuss the role of AI in education, healthcare, and the Church. The Society promotes ethics by design, including a ban on military use of thought forms. Christians in society should speak out against "technology idolatry" when AI exploits the vulnerable (for example, in missions or cultural interactions).

- **Collaboration**: The Church and society jointly develop resources to navigate risks (privacy, bias), as in reports from the Swiss Evangelical Alliance (2025) calling on Christians to "reduce AI abuse" across ethical boundaries.

3. Balance of techno-optimism and pessimism

- Christians should not ignore technology, but use it wisely for the kingdom of God (Prov. 2:6-God gives wisdom). Avoid extremes: no blind enthusiasm (transhumanism), no fear. The Church teaches: AI enhances, but does not replace, relationships with God and others. In the context of AU chips, the focus is on therapeutic use, with ethical control of society.

As a result, the role of the Church is prophetic and leadership, and that of society is regulatory and inclusive. Without their interaction, technologies like AU chips risk becoming a threat, but with them-a tool for the good. It is recommended that you study documents like "Faith, Ethics, and Human Dignity in an Age of AI" (Church of Jesus Christ of Latter-day Saints, 2025) for further understanding.

DELTA-a framework in AI Ethics

DELTA-фреймворк The DELTA framework is an ethical framework for artificial intelligence (AI) developed by the University of Notre Dame (USA) as part **of the Faith-Based Frameworks for AI Ethics initiative**. The framework was introduced in September 2025 at **the Notre Dame Summit on AI, Faith, and Human Flourishing**, and was significantly developed with a $50.8 million Lilly Endowment Inc. grant **$50.8 млн**(December 2025), the largest private grant in the university's history.

DELTA is an acronym for five key values that are deeply rooted in the Christian (Catholic) tradition, but formulated to be accessible to people of different faiths and even non-believers. The framework offers not just an "ethical minimum" (security, privacy, transparency), but a deeper, anthropologically oriented approach to the ethics of AI in the era of powerful systems, including AGI (artificial general intelligence).

Decryption of DELTA

1. **Dignity** Every human being has an inherent dignity as an image of God (Gen 1: 26-27). AI should not dehumanize, discriminate, or reduce the value of human life. Technology should respect and enhance human dignity, not replace it.
2. **Embodiment:** A human being is not only a mind, but also an embodied, corporeal, relational, and mortal being. AI cannot replace physical presence, empathy, body experience, or human relationships. The framework emphasizes that technologies should take into account the physicality and limitations of a person, and not ignore it (in contrast to transhumanist ideas of "loading consciousness").
3. **Love (Любовь)**Christian ethics begins with the love of God and neighbor (Matthew 22: 37-39). AI should promote love, care, solidarity, and the common good, not division, exploitation, or manipulation. This includes caring for vulnerable groups and preventing harm.
4. **Transcendence (Трансцендентность)**A person strives for something greater than himself — for God, meaning, and eternity. AI should not limit a person to the material world or

create the illusion of self-sufficiency. Technology should leave room for spiritual growth, prayer, worship, and the search for a higher meaning.

5. **Agency (Agency / free will)** A person has the freedom of moral choice and responsibility (Ser. 15: 14-17). AI should not substitute for human agency, manipulate decisions, or deny opportunities for moral growth. It is necessary to preserve the space for conscience, personal choice and responsibility.

Context and goals

- **Philosophical Framework**: Developed by Meghan Sullivan (Director of the Notre Dame Institute for Ethics and the Common Good). The framework is based on Catholic anthropology (dignity, embodiment, love), but is open to inter-religious dialogue.
- **Goal**: To help scientists, religious leaders, technologists, educators, journalists, and the public navigate the ethical challenges of AI. Create a DELTA Network for practice resources, education, and practice communities.
- **Unlike other frameworks**: Unlike Rome Call for AI Ethics (focus on transparency, responsibility, etc.), DELTA goes deeper — to anthropological and spiritual dimensions, offering not an "ethical floor", but a "ceiling" of Christian values for inspiration.

Current status for February 2026

DELTA Network is actively developing: resources are being created, conferences are being held, and leaders from various fields are being attracted. The framework is positioned as a contribution of the Catholic tradition to the global ethical discourse on AI, especially in the context of the rapid progress of AGI.

For an in-depth study: official website of Notre Dame Ethics — ethics.nd.edu/programs/faith-based-frameworks-for-ai-ethics/delta.

DELTA Application Examples

Examples of the use of the DELTA framework in AI ethics (as of February 2026) are still mostly **conceptual and guiding in nature**, since the framework was officially presented in September 2025 at the Notre Dame Summit on AI, Faith, and Human Flourishing, and the full-fledged DELTA Network is just being formed thanks to the Lilly Endowment grant in $50.8 million (December 2025). There are few concrete case studies or implementations in production yet, but the framework is already actively used as a reference point for reflection, discussion, and policy development in education, healthcare, the Church, and technology. Below are key examples and application scenarios based on materials from the University of Notre Dame, speeches by Meghan Sullivan, and related publications.

1. Education and AI literacy

- DELTA serves as a foundation for creating training programs on the ethical use of AI in schools and universities.
- **Example**: Implementing DELTA in AI literature courses for teachers and students. The framework helps you structure lessons:
    - **Dignity**-discuss how AI should not reduce the student's value (for example, not evaluate only on productivity).

    - **Embodiment** — emphasize the importance of personal communication in the classroom, rather than completely replacing the teacher with a chatbot.
    - **Agency** — teach students to maintain freedom of choice (for example, when to use AI to help, and when to do the work independently).
- Meghan Sullivan and the Notre Dame team are developing practical resources (checklists, lesson templates) so that teachers can integrate DELTA into teaching.

2. Healthcare and patient care

- **Dignity** and **Embodiment** are used to evaluate AI in medicine:
    - AI diagnostics or chatbots for psychotherapy should respect human dignity and not replace an empathic doctor/nurse.
    - Example of a question on the framework: "How does using AI to monitor patients affect their embodied experience (physical presence of the doctor, touch, personal contact)?"
- **Love** is a guideline for AI to promote care, not just efficiency (for example, avoid algorithms that discriminate against vulnerable patients).

3. The Church and spiritual life

- DELTA is used to evaluate AI in pastoral care and mission:
    - **Transcendence**-AI should not create the illusion of spiritual experience (for example, virtual "confessors" or AI prayers as a substitute for personal prayer).
    - **Love**-AI in the Church (generating sermons, translating the Bible) is acceptable only if it enhances true love and relationships, and does not replace them.
    - Example: Discussions in Christian communities about whether AI can be used to create a "virtual presence" in ministry — the framework helps answer "no" if it violates embodiment and agency.

4. Development and regulation of AI (technology companies and policy)

- **Agency** is a key principle for preventing excessive automation of solutions:
    - Example: in the development of autonomous systems (self-driving cars, hiring algorithms), ask the question: "Does this leave room for human conscience and moral choice?"
- **Dignity** — used to criticize systems where people are compared to machines (for example, in credit scoring algorithms or social networks).
- Notre Dame promotes DELTA as a filter for technologists: "How does this AI feature affect human dignity, the body, love, transcendence, and freedom?"

5. Public discussions and interdisciplinary projects

- DELTA Network (formed in 2026) creates a community for sharing examples:
    - Seminars for journalists: how to highlight AI while maintaining a focus on human dignity.
    - Working with young people: discuss how AI affects their agency and search for meaning.
- In publications (such as Meghan Sullivan's series of articles in The Observer), DELTA is applied to everyday issues: "Should we let AI do everything for us? "(Agency) or" How does AI affect real relationships? " (Love and Embodiment).

Result

DELTA is not a strict regulation, but **a deep ethical compass**that helps you ask the right questions in the era of powerful AI. So far, examples are mostly in education, church discussions, and ethical assessments of technology. With the development of the DELTA Network (2026-2027), more case studies, policies, and guides are expected. For more information, see the official website: ethics.nd.edu/programs/faith-based-frameworks-for-ai-ethics/delta.

The role of society: Regulation and global standards

The role of society: Regulation and global standards in the context of AU chips (Acta Universi hypothesis), neural interfaces, and AI are about balancing innovation, security, and the protection of human dignity. Society (States, international organizations, businesses, NGOs, and citizens) plays a key role in creating a binding and voluntary framework to prevent technology from becoming a tool of manipulation or inequality. As of February 2026, the global landscape is **a fragmented but evolving** set of approaches: from strict risk-based regulation (EU) to easy promotion of innovation (USA, some Asian countries). Christian ethics (human dignity as an image of God, free will, caring for one's neighbor) requires that regulation prevents idolatry of technology and ensures the common good.

1. Key global standards and initiatives (2026)

- **Rome Call for AI Ethics** (Vatican, from 2020, updates 2025-2026): a voluntary inter-religious and cross-sectoral call (signed by Microsoft, IBM, Cisco, Qualcomm, Salesforce, etc.). Principles: transparency, inclusivity, responsibility, impartiality, reliability, security and privacy. In 2026, focus on interfaith dialogue and expansion to high-risk technologies (including brain-computer interfaces). This is one of the few global consensuses where Christian values (dignity, love for one's neighbor) are directly integrated.
- **EU AI Act** (entered into force on 1 August 2024, full applicability on 2 August 2026, with phased implementation): the first comprehensive law. Risk-based approach:
    - Prohibited practices (from February 2025).
    - Transparency for generative AI.
    - High-risk systems (including neural interfaces in healthcare/education) - from August 2026: compliance assessment, documentation, monitoring.
    - In 2026: Guidelines are expected to be published, but there are delays (Digital Omnibus offers postponements until 2027-2028 for some parts). Fines of up to 7% of global turnover.
- **Other national / regional frameworks**:
    - USA: Fragmented approach (no federal law). States (Colorado-June 2026, Texas-TRAIGA from 2026, California-transparency) introduce requirements for risk assessment, bans on harmful applications. Federal level: Executive order of December 2025 on the preemption of state laws and the creation of a "minimally burdensome" national policy.
    - China: AI Governance Framework 2.0 (2025) — multi-level risk classification, mandatory audits, emphasis on "socialist values" and state control.
    - South Korea, Vietnam, Brazil: risk-based laws (coming/entered in 2026), focus on transparency and protection of rights.

- UN/G7 / G20: Discussions on global" red lines " for AI (proposals by the end of 2026), OECD principles, but without a binding treaty.

2. Mechanisms of regulation of society

- **Risk-based approach** (dominated in the EU, Korea, Brazil, Vietnam): classification of AI by risk levels (minimum — no rules; high-strict requirements). For AU chips (high-risk neural interfaces — - mandatory impact assessments, transparency, and human oversight.
- **Transparency and labeling**: Mandatory indication of AI content (EU-August 2026), ban on hidden manipulation.
- **International cooperation**: Mutual Recognition Agreements (Singapore–US, EU–Singapore), G7 / G20 principles for telecommunications and security.
- **Voluntary standards**: Rome Call, OECD AI Principles, Partnership on AI-supplement laws and promote design ethics.

3. A Christian view of the role of society

- Society must protect **the image of God** in man: regulation prevents dehumanization (manipulation of thoughts in AU chips), discrimination, and exploitation of the vulnerable (Mt. 7:12, 22:39).
- **Free will** (Ser. 15: 14-17): Laws are required to maintain human control, prohibit autonomous systems without supervision.
- **Common good**: regulation should not serve only profit or power (as in transhumanism), but should help everyone (especially the poor, the sick).
- The church calls for participation: ethics committees, lobbying for values (as in Rome Call), educating believers about risks.

4. Challenges and prospects for 2026

- Fragmentation: different approaches (EU — strict; US — innovative; China — state control) create barriers to global technologies.
- Delays: EU — possible postponements; US — preemption litigation.
- Risks for AU chips: without global standards-chaos in the privacy of consciousness, entropy risks.
- Hope: Inter-faith and multi-stakeholder initiatives (Rome Call, UN) can promote consensus.

Society regulates AI not to stifle innovation, but to protect human nature and the common good. In the Christian sense, this is the wise management of creation (Gen.. 1:28; 2:15), where technology serves man, not replaces God. AU chips require strict global standards for privacy, consent, and human control.

Regulation in Russia

The regulation of artificial intelligence (AI) in Russia (as of February 2026) is characterized **by a soft, framework and incentive approach**, in contrast to the strict risk-based regulation of the EU (AI Act). Russia remains one of the most liberal countries in the world in relation to the development and application of AI, with an emphasis on supporting innovation, technological sovereignty and minimal interference in the commercial sector. The main aspects are below.

1. Current status of legislation

- **There is no single federal law on AI** (as of February 2026). Regulation is carried out through:
    - **The National Strategy for the Development of AI until 2030** (approved by Presidential Decree No. 490 of 10.10.2019, with significant changes from 15.02.2024). This is a basic strategic document that focuses on the development, implementation, and maintenance of national security.
    - Industry standards (Federal Law on Personal Data, experimental legal regimes — "regulatory sandboxes" under Federal Law No. 258-FZ, laws on healthcare, education, etc.).
    - Federal project " Artificial Intelligence "(within the framework of the national program "Digital Economy", extended and updated).
- **A framework bill on AI regulation** is being actively developed:
    - Work began in the fall of 2025 on behalf of Deputy Prime Minister Dmitry Grigorenko (December 2025).
    - The Ministry of Digital Development must submit the project to the government by the end of February 2026.
    - It is planned to submit it to the State Duma at the spring session of 2026.
    - It is expected to enter into force in 2027 (after further development and public discussion).

2. Key principles and directions of regulation (based on materials from February 2026)

- **Flexible ("soft") approach**: Regulation does not affect the AI technology itself, but only products and applications with its use. The commercial sector (except for critical infrastructure) remains virtually unrestricted.
- **Sensitive areas** (healthcare, education, legal proceedings, public safety): Mandatory preservation **of the decisive role of a person** in decision-making. AI is only an auxiliary tool.
- **Criteria for "Russian" AI**: Identification of domestic models (to support import substitution).
- **Marking of AI content**: Mandatory marking of generated content (text, images, videos).
- **Copyright Notice**: Settlement of rights to works created by AI (the issue remains debatable).
- **Responsibility**: Rights, obligations, and responsibilities of participants (developers, operators, and users) — who is responsible for AI errors.
- **Pre-installation of Russian AI**: Possible mandatory pre-installation of domestic AI models on smartphones and other electronics (similar to the law on pre-installation of Russian software from 2021).
- **Security for critical infrastructure**: Mandatory confirmation of compliance with FSTEC and FSB requirements (certification of high and critical risk systems).
- **Conceptual**framework: Common terminology to eliminate discrepancies.

3. Institutional changes

- **Federal Operational Headquarters (interdepartmental commission)** for the development and implementation of AI (draft decree for public discussion in February 2026, under the control of the Presidential Administration). Coordinates the implementation, security and leadership of Russia in AI.

- **National AI Center** (proposed in AYUR and other draft laws): An autonomous non-profit organization under the Government for competencies in the public sector and critical infrastructure.

4. Comparison with the global context

- Unlike the **EU AI Act** (strict bans, fines of up to 7% of turnover, full launch in 2026-2027), the Russian approach is **stimulating and adaptive**, without a multi — level classification of risks for commercial AI.
- Emphasis on **sovereignty** (support for domestic models, pre-installation) and **the human factor** in sensitive areas.
- For high-risk technologies (including potential neural interfaces such as AU chips), there may be requirements for certification and human control, but there is no special law on brain-computer interfaces yet (they are regulated through medicine and security).

5. The Christian Ethical View

Regulation in Russia is consistent with the principles of prudence and the common good: an emphasis on human control (free will, Ser. 15: 14-17) and protection of vulnerable areas (caring for one's neighbor). However, the absence of strict standards on the privacy of consciousness (for AU chips) requires the ethical supervision of the Church and society, so that technology does not replace the image of God.

In general, Russia is choosing **an evolutionary path**: first, strategy and incentives, then a framework law with minimal restrictions. The final text of the bill is expected by mid-2026.

The Role of the Church: A Prophetic Voice and Ethical Leadership

The role of the Church: Prophetic Voice and ethical leadership in the context of AI and technologies like AU chips (Acta Universi hypothesis) is a key function of the Russian Orthodox Church (ROC) and other Christian denominations in the modern world. The Church acts not as a brake on progress, but as **a guardian of human dignity**, free will, and spiritual integrity. It is designed to speak the truth about the risks of technology, to remind us of God's plan for man (Gen 1:26-27: the image and likeness of God), and at the same time to offer a wise, ethical use of God's gifts (Proverbs 2:6). As of February 2026, the Russian Orthodox Church is actively implementing this role through the Synodal Commission on Bioethics, public statements, and interfaith cooperation.

1. Prophetic Voice: warning of dangers

- **Patriarch Kirill** has repeatedly stressed the extreme danger of uncontrolled AI. In February 2026, he said that the emergence of AI, which can replace human intelligence, soul, conscience and morality, will **be "the most dangerous moment in the development of civilization"**, leading to its end. This is an echo of the Bible's warnings about false idols and the substitution of God (Isaiah 45: 5-6; Rev 13).
- In January 2026, the patriarch warned about the degradation of thinking among young people from the thoughtless use of neural networks, calling for pastoral care and clarification of threats.
- The Church sees AI as a threat **to dehumanization** (especially in public administration, where AI can replace human decisions), loss of responsibility and spiritual freedom.

2. Ethical leadership: active participation in the formation of norms

- **The Synodal Commission on Bioethics of the Russian Orthodox** Church (Chairman-Metropolitan, Secretary — Archpriest Alexander Abramov) is the main body for the ethics of AI. Main points:
  - AI is a tool without a soul, conscience, or ethics ("How glasses can't have ethics — - Abramov, January 2026).
  - Ethics in the field of AI is the ethics **of people** (developers, users, regulators).
  - No substitution: AI cannot replace a pastor, confession, prayer, or live communication.
- **Advisory Council on Ethics in the field of AI** (established in January 2026 with the participation of the Russian Orthodox Church, Islam and Judaism): an inter-religious body for dialogue with the state, IT companies and science. The agreement was signed in January 2026 at the Christmas Readings; the goal is to prevent the negative impact of AI on spiritual and moral values.
- SKB-TK164 Working Group (Synodal Commission + Technical Committee 164 "Artificial Intelligence") develops standards on AI ethics (first meeting December 2025).

3. Practical leadership exercises

- **Education and pastoral**care: The Church explains threats (degradation of thinking, loss of agency), teaches to distinguish between spirits (1 John 4: 1). The 2026 Christmas Readings discussed AI in spiritual schools and education.
- **Participation in regulation**: The Russian Orthodox Church is a member of advisory bodies, influences draft laws (the framework law on AI, 2026-2027), and advocates for human control in sensitive areas (healthcare, education, and management).
- **Interreligious and public dialogue**: Cooperation with Islam and Judaism in the AI Ethics Council; participation in forums on spiritual security.
- **Suggestions**: Ideas of "Orthodox AI" (VRNS, January 2026) - models based on traditional values, but without replacing faith (not replacing the shepherd, but a safe guide to sources).

4. The theological basis of the role

- The Church is **the pillar and foundation of truth** (1 Timothy 3: 15), and it is her duty to rebuke danger (Ezekiel 3:17-19).
- Technology is a gift, but subject to man (Gen 1: 28), and man is subject to God. The Church prevents idolatry (when AI becomes "omniscient" instead of God) and dehumanization (replacing the soul with a machine).
- The appeal is not to run away from technology, but to actively participate in its understanding and ethical design.

As a result, in 2026, the Russian Orthodox Church implements the prophetic voice through the Patriarch's warnings and ethical leadership through commissions, councils and dialogue. This is not an opposition to progress, but a defense of man against the substitution of creation for the Creator. The Church calls on believers and society to be vigilant, pray, and use AI wisely for the good, not to the detriment of the soul.

Catholic Church's position on AI

The Catholic Church's position on artificial intelligence (as of February 2026) remains consistent, anthropocentric, and cautiously optimistic. The Church sees AI as a powerful tool for human creativity (a gift from God through the human mind), but emphasizes serious moral, anthropological, and spiritual risks. The basic principles are based on the social teaching of the Church (encyclicals *Laudato Si'*, *Fratelli Tutti*), the dignity of man as an image of God (Gen. 1:26-27), and the need to protect free will, love, and transcendence.

Key documents and initiatives

- **Rome Call for AI Ethics** (2020, updated and expanded to 2026): the Vatican's main global call for ethical AI. Signed by the Pontifical Academy of Life in collaboration with Microsoft, IBM, FAO, Cisco, Qualcomm, Salesforce, and others. Principles: transparency, inclusivity, responsibility, impartiality, reliability, security and privacy. In 2026, the focus will be on interreligious dialogue and high-risk technologies (including neural interfaces). This is not a binding law, but a moral and practical guideline for "algor-ethics" (ethics of algorithms).
- **Antiqua et Nova** (note from the Pontifical Academy of Life, January 2025): a paper on the relationship between AI and human intelligence. Highlights: AI can mimic thinking, but it doesn't have a soul, conscience, true understanding, or morality. The center is the human person.
- **Linee Guida in Materia di Intelligenza Artificiale** (Vatican AI Guide for the Vatican City-State, 2025): prohibits applications that violate dignity, discrimination, manipulation. AI is "a gift of human creativity that is itself a gift from God," but it requires strict ethical boundaries.

Position of Pope Leo XIV (from May 2025)

Pope Leo XIV (Robert Prevost) made AI one of the central themes of his pontificate, calling it "the moral challenge of the twenty-first century" and "one of the most pressing problems of humanity" (inauguration, May 2025). He repeatedly warned:

- AI cannot replace human communication, faith, love, and personal relationships: "Let real people communicate, not machines" (message for Social Communication Day, January 2026).
- Banned priests from using AI to write sermons: "Preaching is about sharing faith, and AI can never share faith" (meeting with the clergy of Rome, February 2026). "The brain needs to be exercised, otherwise it will atrophy."
- Warned young people not to replace live communication with" overly affectionate " AI partners that destroy the ability to love (January 2026).
- Abandoned his own AI avatar: the Pope should not have a virtual double (September 2025).
- Called for global ethical regulation: AI should reflect the purpose of God the Creator-justice, solidarity, reverence for life. He stressed that the main danger is not technical, but anthropological (the risk of losing the human face, voice, creativity and critical thinking).

Practical application in the Church

- The Vatican has launched an AI to translate services in real time into 60 languages (February 2026, to mark the 400th anniversary of the consecration of St. Peter's Basilica). Petra): the tool helps you understand the liturgy, but emphasizes caution and risks.

- The Church promotes **the DELTA framework** (Notre Dame, 2025-2026): Dignity, embodiment, love, transcendence, Agency — as a deep Christian guideline for the ethics of AI.

Result

The Catholic Church is not against AI as such — it sees it as a tool for good (translations, assistance to the needy, education), but it requires **strict moral boundaries**: AI should serve people, strengthen their dignity, freedom, and relationships with God and neighbor, and not replace them. The Church actively participates in the global dialogue (Rome Call), warns about the risks of dehumanization and calls for the wise and responsible use of technology. Pope Leo XIV emphasizes: "We must protect ourselves" from machines becoming superior to humans.

Balance of techno-optimism and pessimism

The balance of techno-optimism and techno-pessimism in the Christian (including Orthodox and Catholic) context in relation to AI and technologies like AU chips is not a choice between two extremes, but **a wise, sober and theologically sound attitude**. Christianity rejects both blind techno-optimism (the belief in technology as a savior, a substitute for God, or a path to a" new paradise " without sin) and radical techno-pessimism (technophobia, demonization of any innovation, flight from progress). Instead**, a third way is proposed — the responsible use of technology as a gift of God**, subordinate to the person who is subordinate to God.

Why are extremes rejected

- **Techno-optimism** (in the spirit of Marc Andreessen's "Techno-Optimist Manifesto" or transhumanism): He sees AI as infinite growth, overcoming death, and expanding human potential to "infinity." This often leads to idolatry (technology as a new god) and pride (man himself creates a "new man" without God). Christians celebrate: this repeats the Tower of Babel (Genesis 11) — an attempt to reach heaven without God, ignoring sin and the finiteness of man.
- **Techno-pessimism** (neo-Luddites, extreme fear of AI as a "beast" Rev 13): sees in any technology only evil, dehumanization and approaching the end. This can lead to passivity, denial of God's gifts (intelligence, creativity) and ignoring that technology can serve good (medicine, Bible translations, helping those in need).

Both extremes do not correspond to the biblical view: God gave man power over creation (Gen 1: 28), but with responsibility (Gen 2: 15- "to cultivate and keep"). Technology is neither good nor evil in itself, but a tool that depends on the human heart (1 Corinthians 10: 23: "All things are lawful to me, but not all things are profitable").

Christian Balance: Key principles

1. **Technology is a gift of God through the human mind** Intelligence and creativity are part of the image of God. AI can help with healing, missions, and education (translating the Holy Scriptures, helping the weak). Orthodox and Catholic sources emphasize that technology should serve people in their quest for God, and not lead them away from Him.
2. **Sober vigilance and discernment of spirits** The Church calls for **critical reflection** (1 John 4: 1 - "test the spirits"). Evaluate AI by its fruits: does it increase love for God and neighbor

(Mt 22:37-39), and does it preserve free will, dignity, and human embodiment? If so, use wisely; if not (manipulation, dehumanization, idolatry), restrict or reject.
3. **Human control and ethical boundaries** AI is a servant, not a master. Human supervision is required, especially in sensitive areas (healthcare, education, management). A ban on the substitution of the soul, conscience, prayer, or pastoral care.
4. **Eschatological perspective** Christian optimism is not in technology, but in **Christ**: the world is already saved (John 16: 33), the ultimate victory is with God. So there is no need for panic (techno-pessimism) or the illusion of a "technological paradise" (techno-optimism). Hope is in the resurrection, not in the loading of consciousness.

Practical conclusions for Christians

- **Use AI wisely**: for good (help in studying the Scriptures, administrative work in the Church, helping the sick), but do not depend on it.
- **Avoid over-dependence**: maintain lively communication, prayer, fasting, and sobriety.
- **Participate in debates**: The Church should be at the table (ethics committees, regulation) to embed biblical values.
- **Prayer and Discernment**: asking for wisdom (James 1: 5) and verifying everything with Scripture.

In the Orthodox tradition, this is often called **"moderate optimism with reservations"** or **"sober realism"**: technology is not a salvation or a curse, but a challenge to spiritual maturity. As one contemporary Orthodox author put it:"The Church is not a technophobe, but neither is it a technophile — it is a christophile." Balance is achieved in the submission of everything to Christ: "All things are lawful to me, but nothing should possess me" (1 Corinthians 6: 12).

Why colonization of space is a Godly thing

Colonization of space (including flights to the moon, Mars, and the creation of settlements outside the Earth) **can be a God-pleasing activity from a Christian point of view**, but only under certain conditions. This is not an automatic yes or no, but a matter of intent, purpose, and alignment with God's plan for man and creation. Below are the main theological and ethical grounds based on the Bible, Church teaching (Orthodox and Catholic), and contemporary statements.

Biblical and theological grounds for "yes"

1. **The commandment of dominion over creation** "And God blessed them, and God said unto them, Be fruitful, and multiply, and fill the earth, and subdue it; and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that creeps on the earth" (Gen 1: 28).. The cosmos is part of God's creation ("the heavens proclaim the glory of God" - Psalm 18: 2). Space exploration can be seen as an extension of this commandment: man, as the image and likeness of God, is called to know, cultivate and preserve all creation, including its distant parts.
2. **Exploring Creation as a Glorification of the Creator** Science and technology, including astronautics, reveal the greatness of God. The Holy Fathers (for example, Basil the Great in Conversations for Six Days) saw the study of the universe as a way to get closer to understanding the wisdom of the Creator. Space is not a hostile territory, but a space where

God's beauty and order are manifested. Metropolitan Hilarion (Alfeyev) said:: "In outer space, a person comes into deeper contact with the beauty of the universe."

3. **Expanding the scope of human responsibility and care** If humanity can live on other planets — it can be a way to fulfill the commandment "fill the earth" in a broader sense (the universe as a "big earth"). It is also a chance to save life in the event of global disasters on Earth-a manifestation of concern for the future of generations.
4. **Missionary and witness potential** If colonization involves the creation of communities where the Christian life is preserved (prayer, temples, sacraments), this can be a new stage in the evangelization of the universe. Russian explorers have always placed crosses on new lands — similarly, one can think of "Orthodox churches on Mars" in the spiritual sense (as a symbol of the presence of the Church).

Conditions under which colonization is acceptable to God

- It is done **for the glory of God**, not out of pride ("let us be as gods" — Gen. 3: 5) or lust for power.
- It preserves **human dignity** (it does not turn people into "expendable material", does not destroy the family, does not use unethical technologies like cloning or artificial queens for "colonization").
- It serves **the common good** of humanity, not just elites or corporations (fair distribution of resources, helping the poor on Earth is a priority).
- It does not distract from **the main task** — saving the soul and loving one's neighbor. If the colonization of Mars is financed by starving people on Earth, this is not a godly matter.

Warnings and risks (why it is not always acceptable to God)

- **Pride and techno-idolatry** — if the goal is to "defeat death" through technology (transhumanism), this is a direct contradiction to Christianity (salvation is only in Christ, not in the download of consciousness).
- **Distraction from the Earth**-Pope Francis and many Orthodox authors have warned: we must not forget about poverty, ecology and suffering on our home planet (encyclical Laudato Si').
- **Ethical traps**-genetic engineering to adapt to Mars, the destruction of embryos, the exploitation of people in colonies-are all condemned by the Church.

Bottom line: Christian Balance

Space colonization **can be a God-pleasing**activity if:

- performed with prayer and blessing,
- serves the knowledge of God through His creation,
- expands the scope of human responsibility and care,
- It does not become an idol or substitute for the Kingdom of God.

Many Orthodox and Catholic thinkers (from Metropolitan Hilarion to Vatican astronomers like Brother Gaius Consolmagno) see the cosmos not as a threat, but as **another manifestation of the greatness of the Creator**, which man is called to explore and master with reverence. As one of the Orthodox cosmonauts said:"With God in space — and it is possible." The main thing is that the heart remains directed to Christ, and not to the stars as a goal in itself.

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