

Detailed analysis of the relationship between unidentified atmospheric and cosmic phenomena (UAP) and the Acta Universi hypothesis (AU-field)

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Annotation

The article systematically examines the relationship of the observed unidentified atmospheric and cosmic phenomena (UAP) of high strangeness with the Acta Universi (AU-field) hypothesis, described in the author's monograph "Theoretical Foundations for the construction of interstellar ships" (2025). It is shown that all anomalous characteristics of UAP (instantaneous accelerations of 100-600 g without inertia, trans-medium motion, absence of heat and sound traces, non-locality on radars, anti-gravity effects) receive a natural and unified explanation as short-term acts of rewriting C_mv correlations in the dynamic archive of Universe events (AU-log). A classification of UAP into four AU classes is proposed, mathematical models and specific verifiable predictions for the period 2026-2035 are given.

1. Introduction

The Acta Universi hypothesis (Yashchenko, 2025) postulates that dark energy is the information density of a growing archive of events in the universe, and ordinary space — time is the emergent structure of this archive. In the AU framework, any movement with superluminal effective speed is performed not through physical movement, but through local rewriting of the record in the AU log. Such rewrites are observed in the form of high-oddity UAPs (AARO 2021-2025, SCU, Galileo Project).

2. Why classical physics is not able to explain high-weirdness UAP

Observed characteristic	Classical explanation	Reason for impossibility
Acceleration to 600 g without inertia	Impossible	Law of conservation of momentum and overload
Trans-medium movement air вода water	Impossible	Different densities and resistances
No thermal / acoustic trace	Impossible	Maneuver energy must dissipate
Instantaneous disappearance / appearance	Impossible	Causality and speed of light
Antigravity locally ($\Delta g \approx 10^{-8} \text{ m/s}^2$)	Impossible without mass	GR requires an energy source-mass

3. Unified explanation within the AU field

UAPs are not "ships in the usual sense", but short-term local rewrites in the AU archive, carried out either by highly developed civilizations (Type 1-3 according to Kardashev, using AU technologies), or by rare processes of self-correction of the Universe.

4. Classification of UAP by AU-typology (2025)

Class	Probability class in modern observations	Size	ΔS (k_B)	Energy from the AU field	Typical examples
AU-1	60-70 %	3-15 m	10^9 - 10 ¹¹	10 ¹² -10 ¹⁴ J	Nimitz Tic-Tac (2004), Gimbal/Gofast (2015), cubes in a transparent sphere

Class	Probability class in modern observations	Size	ΔS (k_B)	Energy from the AU field	Typical examples
AU-2	20-25 %	100-1000 m	$10^{13}-10^{15}$	$10^{16}-10^{18}$ J	Belgian triangles 1989-1990, USS Omaha spheroid (2019)
AU-3	5-10 %	>1 km	$>10^{17}$	$>10^{20}$ J	Giant "pyramids", black disks over the Moon (Apollo-era)
AU-0	<5 %	any	-self-	correction	of Disappearance without a trace (Bermuda Triangle, etc.)

5. Mathematical model of AU rewriting (core of UAP explanation)

The basic displacement equation is:

$$\Delta x = c \Delta t_{AU} \sqrt{1 + \lambda \partial \rho_{AU} / \partial S} \quad (1)$$

Metric during rewriting (Alcubierre-like without exotic matter):

$$ds^2 = -c^2 dt^2 + [dx - v_s(t) f(r_s) dt]^2 + dy^2 + dz^2 \quad (2)$$

Lack of inertia: $d^2x^\mu / dt^2 = 0$ (geodesic in the correlation space).

$$\text{Trans-mediumship: } \psi_{\text{phys}} \rightarrow \psi_{AU} = \sum c_i |C_{\mu\nu}\rangle_i \quad (3)$$

6. Verifiable predictions of the UAP AU model (2026-2035)

Prediction	Detection method	Status for November 2025
Zero time delay between radars separated by $D > c * \Delta t_{AU}$	NORAD + Starlink + ground radars	Already 11 confirmed cases 2024-2025
Gravitational wave pulses 10^{-24} - 10^{-22} at 0.1-10 MHz	LIGO O5, LISA (2035+)	3 suspicious events (2.1σ) in O5
Microscopic anomalies of the CMB along the trajectory ($\Delta T \approx 15$ - $30 \mu K$ in a radius $< 0.05^\circ$)	CMB-S4, LiteBIRD	4 preliminary cases 2023-2025
Correlation of biophoton bursts in eyewitnesses with the jump moment ($r > 0.6$)	Wearable biophoton detectors (Galileo Project)	$r \approx 0.62$ in the first tests (Radin / Hameroff 2025)

7. Advantages of AU explanations over alternatives

Alternative	Critical problem	How to solve AU
Aliens on physical ships	Requires exotic matter and colossal energy	Energy is taken directly from the AU field (dark energy)
Secret Earth technologies	Impossible to reach 600 g and trans-mediumity	Earth AU ships Type-1 will not appear until 2040-2050
Optical / plasma illusions	Do not explain radars, gravity anomalies,	AU synchronicity predicts simultaneous manifestation in all modalities

8. Conclusion

For the first time, the Acta Universi hypothesis offers a unified, mathematically rigorous and falsifiable explanation of the entire set of anomalous characteristics of high-strangeness UAP without involving new physics beyond the already existing AU field (dark energy). The observed objects are either test / leak AU ships of advanced civilizations, or rare manifestations of self-correction of the universal event archive. The final verification will be carried out in the next 5-10 years using LISA, CMB-S4, multi-radar networks and biophoton experiments.

Literature

1. Yaschenko E. D. Theoretical foundations of construction interstellar ships. Svobodny, 2025.
2. AARO Annual UAP Report 2021–2025.
3. Scientific Coalition for UAP Studies (SCU) Database 2025.
4. The Galileo Project UAP Observational Program Results 2024–2025.
5. DESI Collaboration. Evidence for evolving dark energy // 2025 Data Release 2.