

UOIF Ruleset: IMO 2024–2025 (with Official 2025 Results)

UOIF Working Note

August 8, 2025

1 Roles and Hierarchy

Canonical (2025 results live): year info, country, individual, statistics. Expert interpretive: DeepMind (2024/2025), Evan 2025. Community: AoPS. Mirror: historical context only.

2 Claim Gating

Primitives: exact statements/answers/credits/results. 2025 results use canonical links (promoted). 2025 problems: Evan+AoPS, pending official. Interpretations: proofs/methods (1 expert/AoPS). Speculative: label only.

3 Scoring and Allocation

$s(c)$ weighted by authority/verifiability/depth/intent/recency minus noise. Allocations: 2025 results $\alpha=0.12$; 2025 problems $\alpha=0.15$ – 0.20 ; 2024 $\alpha=0.10$ – 0.15 ; interpretations $\alpha=0.35$ – 0.45 . Reliabilities: 2025 results $N\approx 0.97$; 2025 problems $N\approx 0.88$ – 0.90 ; 2024 $N\approx 0.92$ – 0.95 . Posterior: $P(H | E)=0.85$ – 0.90 , $\beta=1.15$ (results), up to 1.20 when full problems post.

4 Decision Equation

$\Psi = [\alpha S + (1 - \alpha)N] \exp(-[\lambda_1 R_a + \lambda_2 R_v]) P(H | E, \beta)$ with $\lambda_1=0.85$, $\lambda_2=0.15$. Lower R_a/R_v as canonical/URLs appear.

5 Promotion Triggers

2025 results: canonical live \rightarrow promote to Empirically Grounded. 2025 problems: upon official posting \rightarrow promote to Primitive/Empirically Grounded. 2024: promote with official text where available.