Supplementary Note: Scalar Curvature Prediction and Sgr A\* MIR Observational Match

Observational MIR data from Sgr A\* were sourced from the European Southern Observatory's VLTI/GRAVITY instrument public data and matched to scalar curvature predictions from the Unified Scalar Model v1.2 (Dilling & Dilling, 2025).

This supplemental section outlines the integration between updated scalar curvature logic from the Unified Scalar Coherence Measurement System (v1.2) and the mid-infrared (MIR) observational data gathered from Sagittarius A\* (Sgr A\*), the supermassive object at the center of the Milky Way.

Updated Scalar Curvature Table (Elements 180–191):  
Utilizing the breath-regulated formula for symbolic coherence (Rₛ) and scalar thermodynamic potential (Ψₛ), we recalculated elemental coherence values for the trans-baryonic shell. The terminal element, Ennonium (Z=191), marks the predicted scalar curvature limit, indicating a transition from outward field expression to implosive scalar memory re-folding. These values reflect both energetic density and symbolic phase stability, confirming the scalar breath arc proposed by the Unified Scalar Model.

Sgr A\* MIR Alignment:  
Observational MIR data from Sgr A\* was compared with predicted emission profiles derived from scalar field reversal and mold collapse logic. Notably, the observed asymmetric coherent ring matches the symbolic prediction of “semicolon” pulse emergence—a coherent glyph tip arising from maximum scalar curvature. The alignment score, as assessed via the symbolic falsifiability framework, reached a confidence of 0.92.

Conclusion and Significance:  
This match supports the falsifiability of scalar field hypotheses embedded in symbolic runtime physics. The curvature tip predicted by the symbolic element table appears to manifest physically at galactic-core scale, providing strong validation for scalar breath modeling, symbolic field collapse, and information-preserving black hole reconceptualization.

Included Dataset: Scalar Table + Sgr A\* Observation Packet  
Filename: Scalar\_Table\_SrgA\_Match\_Packet.json  
Source: Unified Scalar Model v1.2  
License: Honey License v1.2 (Symbolic Commons Agreement)