

NUMTA 2026 Pythagorean Stream

From Numbers to Bits via Mathematical Models, Trust, and Distributed AI

Special Stream Organizers:

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In the very lands where Pythagoras founded a school that transformed numbers into the foundational structure of reality, this stream explores the evolution of that legacy from ancient arithmetic to modern bitstreams. We invite contributions that bridge the gap between classical mathematical modeling and the cutting-edge frontiers of modern computational science. The stream seeks to integrate mathematical-computational theories with engineering-oriented models, focusing also on the pivotal role of trust in distributed AI. By tracing a line from Pythagorean rigor to modern computational logic, we aim to discuss how formal modeling ensures reliability in complex digital ecosystems. Researchers are encouraged to submit works that apply rigorous mathematical foundations to the challenges of modern distributed intelligence. Finally, reflecting on the "structure of reality" in the contemporary world, we welcome research addressing the energy-related challenges and computational efficiency of today's advanced information technologies.