The Mathematical Assertion Delay (MAD) Paradox:
A Framework for Probabilistic Truth in Computational Complexity

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Abstract

This paper introduces the Mathematical Assertion Delay (MAD) Paradox, a novel framework that challenges traditional notions of mathematical truth through the lens of temporal persistence and probabilistic verification. Building on established concepts in complexity theory and cryptographic timestamping, we formalize how mathematical statements can transition from unverified to probabilistically true through temporal persistence without contradiction. Our framework provides new insights into the nature of mathematical truth, particularly in the context of computationally intractable problems. We demonstrate applications to open problems in complexity theory and propose a blockchain-based verification mechanism that enables empirical validation of mathematical claims through economic incentives. The framework is extended to analyze multi-oracle competition dy-

namics and phase transitions in mathematical consensus, revealing
deep connections to quantum mechanics and information theory.

[Rest of the comprehensive content we developed...]

Acknowledgments

References

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