Electrical & Computer Engineering

S E M I N A R

Louisiana State University

Quantum Information Processing under Spacetime Constraints

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Abstract—How do you verify the location of someone you don't trust? Quantum position verification (QPV) offers one solution using the principles of quantum mechanics and special relativity. In this talk, I will provide an accessible introduction to quantum communication and describe the framework of quantum information processing under spacetime constraints. The problem of QPV will then be discussed within this framework, and I will review some results on both the theory and experimental sides. Special emphasis will be given to QPV security based on whether adversaries use classical versus quantum communication. No prior knowledge of quantum physics is needed to enjoy this talk.

When: Monday, **9 November 2026,** 9:30 - 10:30
Where: Room 3107 Patrick F. Taylor Hall
Info: `https://www.lsu.edu/eng/ece/seminar`