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Quantum Aspects of Light Beams Carrying Orbital Angular Momentum

This talk will be largely pedagogical in nature. We will review means for creating Laguerre-Gauss beams and other beams of light that carry orbital angular momentum. We will then review procedures for producing such beams in a manner such that they possess strong quantum features and will review laboratory methods for quantifying the quantum nature of these light beams. We will then briefly summarize some of the proposed applications of quantum features of complex light.