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Quantum tomography for Collider Physics

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Quantum tomography reconstructs higher dimensional features of quantum mechanical systems from lower dimensional experimental information. The method is practical and directly processes experimental data while bypassing field-theoretic formalism. Quantum tomography can probe entanglement while avoiding model assumptions such as factorization. We review recent work applying quantum tomography to systematic analysis of collider reactions, including the inclusive production of dijets, and in ultra-peripheral heavy-ion collisions.

Secondary track (number)

Primary authors: Prof. TAPIA TAKAKI, Daniel (University of Kansas); Prof. RALSTON, John P. (University of Kansas); MARTENS, John C. (University of Kansas)

Presenter: Prof. TAPIA TAKAKI, Daniel (University of Kansas)

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