

R Szabo - Double Copy of Noncommutative Gauge Theory

Saturday 9 September 2023 14:00 (45 minutes)

This talk will summarise recent work attempting to understand how standard noncommutative gauge theories, such as those which arise naturally from string theory, fit into the paradigm of colour-kinematics duality and the double copy of gauge theory to gravity. Along the way we shall encounter some novel noncommutative scalar field theories with rigid colour symmetry that have no commutative counterparts, whose double copy prescriptions are deformations of some integrable theories related to self-dual Yang-Mills theory and gravity in four dimensions.