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Title: Manin's Universal Quantum Groups Through the Lens of Zhang Twists & 2-Cocycle Twists, and Twisted Homogeneous Coordinate Rings of Quadrics

Abstract: In this talk, we first explore how a twist of an algebra's multiplicative structure by an automorphism, commonly known as Zhang twists, can be extended to a twist of the associated Manin's universal quantum group of the algebra. Moreover, we determine when a Zhang-twisted Hopf algebra coincides with its 2-cocycle-twisted one. Second, we examine twisted homogeneous coordinate rings, a la Artin and Van den Bergh, of certain quadric.