

*Oklahoma State University*

# Topology Seminar

Title

*Quantum  $6j$ -symbols and generalized hyperbolic tetrahedra*

Speaker: Tian Yang, Texas A&M University

Date: Oct 3, 2023

Time: 4:00 PM

Room: Online

**Abstract:** Volume Conjecture relates the asymptotic behavior of various quantum invariants of a 3-manifold with the geometric information of the manifold. In this talk I will recall the Turaev-Viro invariants and its corresponding Volume Conjecture. Most of the results in this talk will focus on the building blocks of the Turaev-Viro invariants, the quantum  $6j$ -symbols. We observed that the geometric quantity underlying the asymptotic behavior of quantum  $6j$ -symbols is the volume of a suitably generalized hyperbolic tetrahedron. This is a joint work with Giulio Belletti,

*Zoom link TBA*