



Topology Seminar at Texas State

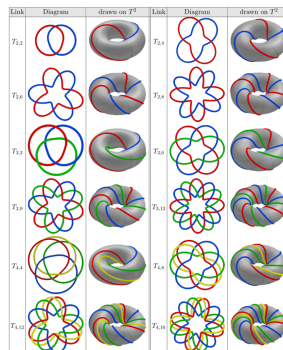
When: Friday, February 3, 2023, 11:00 a.m.

Where: DERR 333 *and* ZOOM (Zoom info at bottom of page)

Presenter: Dr. Christine Ruey Shan Lee

Title: The Jones-Wenzl projector and the Khovanov homology of torus links
(Part 1)

Abstract: We will use the Jones-Wenzl projector to define the colored Jones polynomial, a quantum link invariant generalizing the Jones polynomial discovered by Vaughan Jones. This will allow us to state the famous Volume Conjecture, widely considered to be the most important open problem in quantum topology, that relates quantum invariants to hyperbolic geometry. In a seemingly unrelated direction, Rozansky has shown that the stable Khovanov homology of torus links recovers the categorification of the Jones-Wenzl projector. I will discuss recent work on the stable Khovanov homology of torus links and make a case for how it can contribute to the study of the Volume Conjecture. This is part I of three talks on the Volume Conjecture that naturally follows last weeks seminar talk on the hyperbolic structure of the figure 8 knot complement. Part II and part III will go in depth on topics requested by the audience from part I. There will be plenty of pictures, and students and researchers not in the field are especially welcome.



Zoom Information



Meeting URL (click this)
Meeting ID: 977 0390 3382
Password: manifolds