Sanjay L. Kumar* (kumarsa4@msu.edu). *Families of links in $S^3$ with homeomorphic complements to fundamental shadow links.

In 2015, Chen and Yang provided evidence that the asymptotics of the Turaev-Viro invariant of a hyperbolic 3-manifold evaluated at the root of unity exp($\frac{2\pi i}{r}$) have growth rates given by the hyperbolic volume. In 2018, Belletti, Detcherry, Kalfagianni, and Yang prove this volume conjecture for the complements of an infinite family of hyperbolic links in connect sums of $S^1 \times S^2$ known as fundamental shadow links. In this talk, I will present examples of links in $S^3$ satisfying the volume conjecture through homeomorphisms with complements of fundamental shadow links. (Received February 01, 2020)