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Puttipong Pongtanapaisan* (puttipong-pongthanapaisan@uiowa.edu) and **Jason Joseph.**

Meridional rank and bridge number of knotted surfaces. Preliminary report.

Meier and Zupan showed that every smoothly embedded surface in the 4-sphere can be put in bridge position. This is a 4-dimensional analog of bridge position for a knot in the 3-sphere, and gives rise to a complexity for knotted surfaces called the bridge number. In this talk, we discuss computations of the bridge numbers for surfaces that are not spun knots. The lower bound involves calculations of the meridional rank, which is the minimum number of meridional generators taken over all presentations of the fundamental group of the surface's exterior in the 4-sphere. (Received March 02, 2020)