



## Topology Seminar at Texas State

When: Tuesday, 2019, November 26, 12:30-1:50 p.m.

Where: ENC 230

Speaker: Prof. Thomas Thickstun

Topic: Blowing up some homology 3-manifolds

### ABSTRACT

The speaker will delve into some ancient history found in [1]. Here's the principal theorem (in somewhat pared down form) of that paper:

***Theorem:*** *If a closed, orientable Čech homology 3-manifold with 0-dimensional singular set is the degree-one image of a closed, orientable 3-manifold then it is the strongly acyclic image of a closed orientable 3-manifold.*

(A map as in the conclusion of the theorem is a "blow-up" of the homology manifold of the hypothesis. A surjective map is *strongly acyclic* if its point pre-images are strongly acyclic.)

Over thirty years after the publication of this paper, it is still possible that the restriction on the singular set can be discarded.

[1] "Strongly acyclic maps and homology 3-manifolds with 0-dimensional singular sets."

Thomas Thickstun. Proc. London Math. Soc. (3) 55 (1987) 378-432.