



## Topology Seminar at Texas State

When: 11:00-12:20, Friday, January 31, 2020

Where: Derrick Hall 333

Speaker: Dr. Hiro Tanaka

Topic: *Solid mathematics, I*

### ABSTRACT

Solid mathematics—as developed by Scholze and Clausen—is advertised to solve several modern problems in algebra. Let me list three of these problems: The ability to define completed tensor products in a non-ad-hoc way; the construction of long exact sequences in étale cohomology; and a generalization and stream-lining of the proof of coherent duality (also known as Serre duality in the classical setting).

This will be the first in a periodic series of lectures about solid mathematics. I will give some basic definitions and try to give an overview of the theory.