



ALGEBRA AND GEOMETRY SEMINAR

The Hong Kong University of Science and Technology
Department of Mathematics

More about spans than you ever wanted to know

by Walker Stern

from Technical University of Munich

Higher categories of spans, also called correspondences, play a key role in many algebraic and algebro-geometric constructions — from six functor formalisms to the constructions of Hall algebras. In this talk, I will describe the fundamental categorical structures which underpin ongoing research (joint with Jonte Gödicke, Quoc Ho, and Yang Hu) aimed at constructing braided monoidal categories using higher categories of spans. In particular, I will explain a new approach to (∞, n) -categories of spans and deduce from it a new universal property which allows us to construct the E_2 (braided) algebras described in last week's talk by Jonte Gödicke.

Room 3598 (Lift 27/28) Wed, Mar 18, 2026 04:00 PM

