

Department of Mathematics

AMS Graduate Student Seminar



Page Thorn

The Vector Lattice Tensor Product of Ideals

Followed by "Approaching Graduation" Q & A

Friday, February 17, 2023 11:00 AM, Hume 107

Abstract: In this brief talk, I introduce Archimedean Riesz spaces, also known as vector lattices, and their Archimedean Riesz space tensor product as defined by Fremlin. I define what it means to be an ideal in a Riesz space, then provide a counterexample to the statement "the Fremlin tensor product of ideals is an ideal." Specifically, there exist an ideal I in an Archimedean Riesz space E such that the Fremlin tensor product of I with itself is not an ideal in the Fremlin tensor product of E with itself.