

Texas State Topology Seminar

Friday, February 17, 11:00-noon, in DERR 229

Dr. William Grilliette

"Category Theory – Connecting Branches of Mathematics"

ABSTRACT

This talk, presented at a level accessible to graduate (and advanced undergraduate) mathematics students, gives an overview of category theory, which allows concepts and conjectures from one branch of mathematics to be transferred to another. The first half of the talk will discuss definitions and examples, some done in detail to illustrate methods. The second half of the talk will illuminate particular structures of current interest to the speaker in the study of topology, analysis, algebra, and combinatorics. These topics include the following: adjoint functors, comma categories, and monoidal products.