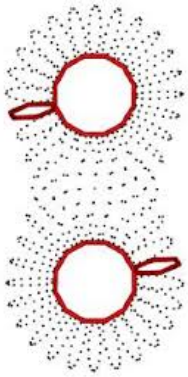
TEXAS STATE UNIVERSITY

The rising STAR *of Texas*



Topology Seminar

2018, April 6, Friday, 11:00-11:50 a.m., in DERR 334

Speaker: Dr. William Grilliette

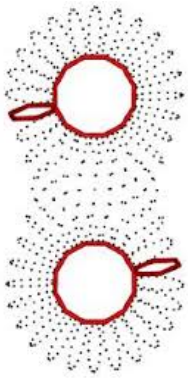
Title: *Functor Categories and Topoi*

ABSTRACT

This talk discusses the notion of a category, where the objects themselves are functors and the morphisms between them are natural transformations. The notions within such a category are very reminiscent of homotopy theory, particularly two notions of compositing natural transformations. Likewise, functors between such functor categories behave similar to the Gelfand transform in analysis. Moreover, a category of functors into the category of sets is a key example of a topos, which plays a major role in the study of sheaves and, more recently, graph theory.

TEXAS STATE UNIVERSITY

The rising STAR *of Texas*



Topology Seminar

2018, April 6, Friday, 11:00-11:50 a.m., in DERR 334

Speaker: Dr. William Grilliette

Title: *Functor Categories and Topoi*

ABSTRACT

This talk discusses the notion of a category, where the objects themselves are functors and the morphisms between them are natural transformations. The notions within such a category are very reminiscent of homotopy theory, particularly two notions of compositing natural transformations. Likewise, functors between such functor categories behave similar to the Gelfand transform in analysis. Moreover, a category of functors into the category of sets is a key example of a topos, which plays a major role in the study of sheaves and, more recently, graph theory.