## **Distinguished Lecture Series**

## Teena Gerhardt

Michigan State University

Friday March 8, 2024

3:30 PM

On Zoom with Viewing Party in RI 209



## Interactions between topology and algebra: advances in algebraic *K*-theory

The field of algebraic topology has exposed deep connections between topology and algebra. One example of such a connection comes from algebraic *K*-theory. Algebraic *K*-theory is an invariant of rings, defined using tools from topology, that has important applications to algebraic geometry, number theory, and geometric topology. Algebraic *K*-groups are difficult to compute, but advances in algebraic topology have led to many recent computations which were previously intractable. In this talk I will introduce algebraic *K*-theory and its applications, and discuss recent advances in this field.

## Live streamed on Zoom. Register in advance for link: https://uregina-ca.zoom.us/meeting/register/tJIsfu-prjkuGtDbZtO3x00R\_XvsKfMmV1aX

Mathematics and Statistics



