## Central Michigan University Department of Mathematics GRADUATE STUDENT SEMINAR

AYUSH KHAITAN Central Michigan University

## CATEGORY THEORY

Tuesday, November 1, 4:00 pm - 5:00 pm Pearce Hall, Room 227

Category Theory is an alternative to set theory as a foundation for Mathematics. It is a universal framework constructed in order to study the relations between various mathematical objects that do not manifest themselves easily. Hence, it is an incredibly powerful tool that mathematicians use to see the "bigger picture".

However, Category Theory is also notoriously difficult to learn and understand at first. The dearth of readable introductions doesn't make it any easier. The aim of my talk will be to introduce some elementary tools in Category Theory, so that one may be encouraged to pursue the topic further.