## Seminar Announcement

## Homological Algebra Seminar



ORGANIZERS: Jonathan Beardsley (jbeardsley@unr.edu) and Sonja Farr (sonjaf@nevada.unr.edu)

TARGET AUDIENCE: Faculty and interested graduate students

ABSTRACT: Homological algebra is the study of homotopy theory of a category of chain complexes, just like classical algebraic topology is concerned with the study of homotopy theory of topological spaces. In this seminar we will explore the behavior of algebraic structures in homotopical settings, where operations are only well-defined up to homotopy, and constraints such as associativity and unitality come in the form of homotopy coherent diagrams.

Specific topics include Hochschild cohomology and the Deligne conjecture, centers and centralizers as universal actions, higher algebra and  $\infty$ -operads, and  $\infty$ -group theory and the isomorphism theorems.

This seminar will be run as a research seminar, so the participants will present their recent research, and the topics will largely depend on the interest of the audience.

Fridays 3-4 pm DMSC 315 Starting 09/01/2023

IF YOU ARE INTERESTED IN PARTICIPATING OR HAVE FURTHER QUESTIONS, PLEASE CONTACT: sonjaf@nevada.unr.edu