

# ALGEBRA SEMINAR

## *A crash course in Homological Algebra*

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ABSTRACT: I will review necessary ingredients from homological algebra. We will talk about chain complexes and their morphisms, chain homotopy operators and quasi-isomorphisms. I will give the de Rham complex and Hochschild complexes as examples. Finally, we will prove the Snake Lemma and talk about filtered complexes and their quasi-isomorphisms.

MONDAY, OCTOBER 11, 2010

**1:10** – 2:30 PM

ROOM 617, WACHMAN HALL  
DEPARTMENT OF MATHEMATICS