"Strange women lying in ponds, distributing resolutions, is no basis for a theory of homology."

-Monty Python

#### The Trivial Notions Seminar Proudly Announces

## Quillen Homology

### A talk by Gijs Heuts

#### Abstract

In the 60's, Quillen introduced a very general notion of "(co)homology", which gives precise meaning to the idea that taking homology corresponds to linearization. His notion reproduces familiar examples such as Hochschild homology (for associative algebras), Lie algebra homology (la Chevalley-Eilenberg), group homology, singular homology of spaces and, more interestingly, the cotangent complex of a commutative ring. We'll discuss why Quillen's abstract perspective is a useful one that is applicable to a wide range of settings (a range that is, in fact, still widening today). After that, we might bump into some toy examples of Koszul duality. Or we might not.

# Thursday Febuary 14<sup>th</sup>, at 1:00 pm Science Center 310