

# ALGEBRA SEMINAR

## *Differential graded (co-)algebras and the (co-)bar construction (Part 2)*

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ABSTRACT: For any differential graded algebra  $A$ , I will construct a canonical map

$$\mathrm{Cobar}(\mathrm{Bar}(A)) \rightarrow A$$

and show that this map is in fact a quasi-isomorphism. If time permits, I will also discuss a special class of differential graded algebras, called Koszul algebras, where the resolution  $\mathrm{Cobar}(\mathrm{Bar}(A))$  can be simplified.

MONDAY, NOVEMBER 8, 2010

**1:10** – 2:30 PM

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