

# GRADUATE SEMINAR

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## The Blakers-Massey Theorem for CDGAs

Monday, August 22, 3:00 PM  
Math Lounge (CW307.20)

### Abstract:

In algebraic topology, the computations of homotopy groups are much harder than that of (co)homology groups, due to the failure of excision. However, a classical result in homotopy theory, the Blakers-Massey theorem, guarantees excision in a certain range. Now it turns out that a similar result holds in an algebraic context.

This talk will begin by presenting the classical Blakers-Massey theorem, with related notions in homotopy theory recalled. People will then be invited to move to the category CDGAs of commutative differential graded algebras. We will state and prove the Blakers-Massey Theorem for CDGAs.