



Speaker: Maurice Chiodo
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Monday, September 27, 2010
9:30 AM
258 Hurley Hall

Title: Constructing splittings and finding non-trivial elements

Abstract:

We use the Higman embedding theorem to show that there is no algorithm to select a non-trivial generator from a finite presentation of a non-trivial group. We also show there is no algorithm to construct a splitting of a finite presentation of a non-trivial free product. In both of these proofs we make use of more elaborate sets than the halting set (the standard tool for decision problems in group theory).