

USC Department of Mathematics
PROBABILITY & STATISTICS SEMINAR

3:30 PM, Friday 20.Feb.09
146 Kaprielian Hall
(Refreshments served at 3 PM)

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Multiple player gambler's ruin problems

We consider two variations of a multiple player gambler's ruin problem. In version one, each stage consists of a selection of two of the active players, who then play a game with the winner receiving 1 unit from the loser. In version two, each stage consists of all active players putting 1 unit in a pot which is then won by one of the players. In both versions a player becomes inactive when her fortune is zero and, independent of previous results, each participating player is equally likely to be the winner of a stage. Among other things we discuss the expected number of stages until there is only a single active player.