

Discrete bidding games

Abstract: Given a two-player combinatorial game G , the discrete bidding version of G involves giving each player a number of bidding chips to start, and having the players bid for the right to make the next move. This setup had been previously investigated for the continuous case by Lazarus et al. under the name of Richman games; continuous bidding games turn out to be equivalent to random-turn games. We investigate the discrete version, noting similarities and surprising differences to the continuous version; most notably, it is not always true that in the large-chip limit the discrete bidding game reduces to the continuous one. This is joint work with Sam Payne (Stanford.)