

Games Games Games or Playing Up to Your Potential

We consider a variety of two player games in which Paul and Carole alternate moves, Paul trying to reach a goal and Carole trying to thwart him. Intrinsic to the analyses is a well chosen potential function. While potential functions are deterministic in our examples they are naturally defined in terms of random play. We examine the Liar Game, the Tenure Game, and the Balancing Vector Game in this general context. We examine further work by two graduate students: The European Tenure Game, studied by Benjamin Doerr (Kiel), and the HalfLie Game, studied by Ioana Dumitriu (MIT).