
YU-RU LIU, University of Waterloo

The shifted Turán sieve method on tournaments

We construct a shifted version of the Turán sieve method and apply it to some counting problems on tournaments. More precisely, we obtain upper bounds for the number of tournaments which contain a fixed number of r -cycles. We also consider an analogous question on t -partite tournaments. These results are the first which deal with cycles on “all tournaments”. This is a joint work with Wentang Kuo, Sávio Ribas and Kevin Zhou.