
* Princeton Discrete Math Seminar *

Date: Wednesday, February 23, 2:15 in Fine Hall 224

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**Tournaments, Voting paradoxes and non-transitive
dice**

Abstract

A committee of $2k + 1$ members has to award fellowships to the top students in the university. To this end, each committee member provides a ranking of all candidates. A student X is considered better than Y , if a majority of the committee members rank X above Y . Having all rankings, the committee members are embarrassed to discover that no matter how they award the fellowships, there will always be a student who didn't get a fellowship but is better than every student who did.

How many fellowships should be awarded to be sure this wouldn't happen?

Joint work with G. Brightwell, H. Kierstead, A. Kostochka and P. Winkler.