VCU Discrete Mathematics Seminar

Two perfect matching problems

Prof Cory Palmer
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Wednesday, April 5
1:00-1:50 EST

In person! in 4145 Harris Hall, and Zoom @
`https://vcu.zoom.us/j/92975799914`
`password=graphs2357`

In this "double feature" we will investigate two problems on one of my favorite combinatorial structures: perfect matchings. Recall that the derangement problem can be formulated as a graph theory question: How many perfect matchings are in the graph of a complete bipartite graph with a perfect matching removed? In the first part of the talk we'll address a generalization of this problem to multipartite graphs.

In the second part of the talk we will show that the upper bound on the maximum possible number of stable matchings among n jobs and n applicants can be improved from 131072^n to 3.55^n.

For the DM seminar schedule, see:

`https://go.vcu.edu/discrete`