VCU Discrete Mathematics Seminar

Rainbow Saturation

Prof Daniel Johnston
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Wednesday, Feb. 24
1:00-1:50

Zoom! @ `https://vcu.zoom.us/j/92975799914`
`password=graphs2357`

A graph G is rainbow H-saturated if there is some proper edge-coloring of G which is rainbow H-free (that is, it has no copy of H whose edges are all colored distinctly), but where the addition of any edge makes such a rainbow H-free coloring impossible. Taking the maximum number of edges in a rainbow H-saturated graph recovers the rainbow Turán numbers whose systematic study was begun by Keevash, Mubayi, Sudakov, and Verstraëte. In this talk, we introduce and examine the corresponding *rainbow saturation number* – the minimum number of edges among all rainbow H-free graphs. This is joint work with Neal Bushaw and Puck Rombach.

For the DM seminar schedule, see:

`https://www.people.vcu.edu/~nobushaw/dms.html`