COLLOQUIUM S

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"Edge-Coloring Graphs on Surfaces: Recent Progress on Grünbaum's Conjecture"

Monday, March 17, 2008 Tea at 4:00 p.m. – Math Lounge, KINSC H208 Talk at 4:15 p.m. – KINSC Hilles 109

Abstract: Branko Grünbaum is a prolific mathematician, generating papers and conjectures in graph theory and polytope theory even in retirement. In 1969, he published a conjecture about the existence of special edge-colorings of graphs drawn on orientable surfaces. Almost no progress was made on the conjecture until 2004, and in 2007 a high-genus counterexample was found—just as the speaker had helped to prove that the conjecture held in certain low-genus cases! Come learn about topological graph theory as a field, the recent progress on Grünbaum's Conjecture, and what really happens in mathematical research when a problem seems to finally be settled. Be prepared to be active!

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