## DISCRETE MATH SEMINAR

Weak degeneracy of graphs

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**Abstract:** Motivated by the study of greedy algorithms for graph coloring, we introduce a new graph parameter, which we call weak degeneracy. This notion formalizes a particularly simple way of "saving" colors while coloring a graph greedily. It turns out that many upper bounds on chromatic numbers follow from corresponding bounds on weak degeneracy. In this talk I will survey some of these bounds as well as state a number of open problems. This is joint work with Eugene Lee (Carnegie Mellon University).

Wednesday, March 16, 2022, 4:00 pm Mathematics and Science Center: MSC E406

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