

abstract

COMPUTER SCIENCE/DISCRETE MATH I

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

A RED/BLUE coloring of a graph is called C -relaxed if the RED vertices form an independent set, while the BLUE vertices induce connected components of order at most C . We show that there exists a smallest integer C such that every cubic graph is C -relaxed colorable. This complements the fact that for 4-regular graphs no relaxed coloring is possible with constant component order. We also show that the problem of deciding whether a cubic graph is i -relaxed colorable is NP-complete for every $2 < i < C$. Joint work with Robert Berke.