Discrete Mathematics Seminar

Illinois State University

2:00–2:50 pm, December 3

Speaker: Stacie Baumann, Auburn University

Equitable (s, p)-edge-colorings

The focus of the talk is on (not necessarily proper) s-edge-colorings of K_ν in which, for all $u \in V(K_\nu)$, the edges incident with u are colored using exactly p colors. In the spirit of proper edge-colorings, here such (s, p)-edge-colorings are required to be equitable: the edges at each vertex are shared evenly among p colors. Here, the structure of equitable (s, p)-edge-colorings is addressed, finding the possible sizes of various color classes. Results concerning equitable (s, p)-block-colorings of C_4-decompositions of $K_\nu - F$ follow as corollaries.