Gee-Choon Lau
MARA Univ. of Technology (Segamat Campus)
Chromaticity of multipartite graphs
November 12, 2014, MH320

Abstract: Suppose $G(V, E)$ is a graph with vertex set V and edge set E. A *proper coloring* of G is a coloring of the vertices of G such that adjacent vertices are assigned different colors. A proper λ-coloring of G is a proper coloring of G using at most λ distinct colors. Let $P(G, \lambda)$ (or simply $P(G)$) be the total number of proper λ-colorings of G, called the chromatic polynomial of G. Two graphs G and H are said to be chromatically equivalent, denoted $G \sim H$, if $P(G) = P(H)$. We write $[G] = \{H \mid H \sim G\}$. If $[G] = \{G\}$, then G is said to be chromatically unique. In this talk, we will discuss the chromatic uniqueness and chromatic equivalence of complete multipartite graphs possibly with some edges added or deleted. Open problems will also be discussed.

Background: Discrete math and some familiarity with graphs.

About the speaker: Gee-Choon Lau obtained his BS in Mathematics from Iowa State University in 1995 and his PhD from Putra University of Malaysia in 2010. He is currently the Head of Research and Industrial Linkages, Department of Mathematics, MARA University of Technology (Segamat Campus), Malaysia. His current research is on chromaticity of graphs and various graph labeling problems.

Snacks in MH331B at 2:30 pm
Talks start at 3 pm

For more information, see our full schedule at:

http://www.math.sjsu.edu/~hsu/colloq/