

# Combinatorics Seminar

Wednesday, April 28, 2010

3:00 pm in Hume 331

Professor Xiaojuan Li

Urumqi Vocational University  
P. R. China

## Some results on path-factors in graphs

### ABSTRACT

Let  $A = \{G_1, G_2, \dots\}$  be a family of graphs. If a graph  $G$  has a spanning subgraph  $H$  such that each component of  $H$  is in  $A$ , then  $H$  is said to be an  $A$ -factor of  $G$ . In this talk, we will focus on the path-factors, that is, each  $G_i$  in  $A$  is a path of length at least one. We will introduce some recent trends in research on the existence of path-factors in graphs and present several new results we obtained on  $\{P_3, P_4\}$ -factors. At the end of the talk, we will also propose some further research problems.