PIMS Distinguished Lecture Series

Gary MacGillivray University of Victoria

Tuesday October 15, 2019 2:20-3:20 p.m.

Research and Innovation Centre (RI) 119



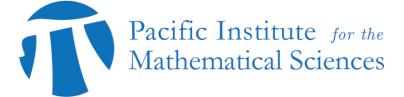
Colouring Oriented Graphs

By *colouring* an undirected graph we mean assigning colours to the vertices so that adjacent vertices are assigned different colours. But what should it mean to colour a graph in which every edge has a direction? Colourings of such directed graphs has been an active area of study since 1994. We will start with the the motivation for the definition of an *oriented colouring*, and then survey results in the literature concerning algorithms complexity, bounds for the number of

colours needed, and possible analogs of the four colour theorem.

Mathematics and Statistics







www.pims.math.ca