HONOURS SEMINAR

Date: Monday, April 7
Time: 3:30 – 4:30
Location: CW 307.20 (Math Lounge)

Tara Petrie

A Proof of Cauchy's Interlacing Theorem

Supervised by Shaun Fallat

Abstract: Cauchy's Interlacing Theorem is a result dating back to the 1800s which has many applications. The proof most often given relies on the Courant-Fischer min-max theorem, a result whose proof is tricky, long, and requires some upper level matrix analysis. In order to better understand any theorem it can be helpful to see a straightforward proof that relies on more basic results. This talk focuses on a proof of Cauchy's Interlacing Theorem that depends on basic linear algebra.

Mathematics and Statistics

University of Regina