

Seminar of differential equations will continue on **June 12, 2019 at 11am in seminar room on the 1st floor.**

**prof. Stephen L. Clark** (Missouri University of Science and Technology)

### **Krein's Formula and Sturm-Liouville Operators on a Compact Interval**

Abstract:

Recalling parametrizations of self-adjoint extensions associated with a regular, symmetric, second-order differential expressions, we give a comprehensive accounting of all self-adjoint extensions of the minimal Sturm-Liouville operator in terms of Krein's formula for resolvent differences given Sturm-Liouville operators with Dirichlet boundary conditions at  $a$  and  $b$  as a convenient reference operator, and give a detailed description of the Krein extension of the minimal Sturm-Liouville operator.