

**SPEAKER:**

Morgan Schreffler, University of Kentucky

**TITLE:**

Using the method of layer potentials to solve a mixed boundary value problem

**ABSTRACT:**

Following the exposition by William McLean in his book *Strongly Elliptic Systems and Boundary Integral Equations*, we use the method of layer potentials to show that on a bounded Lipschitz domain, the mixed problem for Laplace's equation is equivalent to a  $2 \times 2$  system of boundary integral equations.