Speaker: Robert Clarke, GMU

Title: The Dirichlet Problem – Part III

Abstract: We conclude the discussion on the Dirichlet problem (DP). The following topics will be covered:

- Zaremba's and Lebesgue's counterexamples in dimensions two and higher.
- Poincare' s method.
- Some material on subharmonic functions.
- The solutions to the DP of Perron and Wiener.
- The DP solution in dimensions two and higher.
- Extensions of the DP to other settings and generalizations, e.g, bad boundaries, L^p boundary functions, harmonic measure, higher order elliptic PDEs.