1154-35-25 **Tatiana Toro*** (`toro@uw.edu`), University of Washington, Department of Mathematics, Box 354350, Seattle, WA 98195-4350. *Differential operators and the geometry of domains in Euclidean space.*

In this talk we will introduce an area of analysis that is concerned with the extent to which a differential operator, and the properties of its solutions, determine the geometry of the domain on which they are considered. We will initially describe the case where the differential operator sees the domain as a homogeneous medium. We will contrast this with several inhomogeneous cases and mention some recent results in that direction. The tools used come from analysis of partial differential equations, harmonic analysis and geometric measure theory. (Received June 26, 2019)