

1121-35-151 **Irina Mitrea*** (imitrea@temple.edu), 1805 N Broad Street, 638 Wachman Hall, Department of Mathematics, Temple University, Philadelphia, PA 19122. *Harmonic Analysis and Complex Variables Techniques in Scattering Theory.*

This talk serves as an illustration of the principle that combining techniques originating in Complex Variables, Geometric Measure Theory, and Harmonic Analysis creates a potent mix. The focus is on Scattering Theory for null-solutions of perturbed Dirac operators in exterior Ahlfors-David regular domains, treated via methods and tools of Complex Variables flavor such as higher dimensional versions of the Cauchy's operator, Hardy spaces, Fatou theorems, unique continuation property, etc. (Received July 17, 2016)