1077-35-2458 Irina Mitrea* (imitrea@temple.edu), Department of Mathematics, Temple University, 1805 N. Broad Street, Philadelphia, PA 19122. Regularity properties of Green functions in non-smooth domains.

I this talk I will discuss recent results regarding regularity properties of Green functions associated with elliptic differential operators of second and higher order in Lipschitz domains. This analysis includes the case of second and higher order elliptic systems with constant coefficients, the bi-Laplacian, and the Stokes system. (Received September 22, 2011)