Ovidiu Munteanu*, Department of Mathematics, University of Connecticut, 341 Mansfield Road U1009, Storrs, CT 06269. The Poisson equation on complete manifolds.

I will present recent results, joint with Chiung-Jue Sung and Jiaping Wang, about existence and estimates of solutions to the Poisson equation on complete manifolds with positive bottom spectrum. In the process, we develop new sharp estimates for the heat kernel and Green’s function on such manifolds. (Received August 20, 2017)