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The Neumann problem in metric measure spaces

In this talk, we will discuss progress on the study of the Neumann problem for the p-Laplacian in the context of a doubling metric measure space supporting a p-Poincaré inequality. The focus will be on recent joint work with Luca Capogna, Rikka Korte, and Nageswari Shanmugalingam, where we establish Hölder regularity of the weak solutions with an exponent that is sharp with respect to the hypotheses we require from the Neumann data.