Dyadic models in linear and nonlinear elliptic PDE

Abstract: We intend to present recent results on linear, quasilinear and fully nonlinear elliptic PDE with singular coefficients and data where dyadic models play an important role. This includes criteria of solvability, global estimates of Green's functions, and characterizations of removable singularities for equations which involve the fractional Schroedinger, p-Laplacian or k-Hessian operators and source terms.