TEMPLE UNIVERSITY

Department of Mathematics

Analysis Seminar

Room 617 Wachman Hall

Monday, October 24, 2022, 2:30 p.m.

Multilayer potentials associated with the poly-Cauchy operator in non-smooth domains

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Abstract: The subject of this talk is the analysis of multilayer potentials associated with integer powers of the classical $\overline{\partial}$ operator in non-smooth domains in the complex plane. This analysis includes integral representation formulas, jump relations, higher-order Fatou theorems, and higher-order Hardy spaces.

This is joint work with Irina Mitrea (Temple University), Dorina Mitrea and Marius Mitrea (Baylor University).