TEMPLE UNIVERSITY
Department of Mathematics

Analysis Seminar

Monday, January 30, 2016 at 14:40, Wachman 617
The Dirichlet problem for elliptic systems with data in Köthe function
spaces

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Abstract: In this talk I will discuss well-posdness results for the Dirichlet problem for second-order, homogeneous, elliptic systems, with constant complex coefficients, in the upper half space, with boundary data from Lebesgue spaces, variable exponent Lebesgue spaces, Lorentz spaces, Zygmund spaces, as well as their weighted versions. A key tool in this analysis is establishing boundedness of the Hardy-Littlewood maximal operator on appropriate Köthe function spaces. This is joint work with Dorina Mitrea, Marius Mitrea and Jose Maria Martell.