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**NICOLAS HOELL**, University of Toronto  
*Some Uses of Harmonic Functions in Imaging*

We discuss results involving harmonic function theory in tomography and, time permitting, current density impedance imaging. In the tomography case, complex analysis is a powerful tool for obtaining representation formulae for densities arising in ray transform imaging. We present joint work with G. Bal. In the case of current density imaging, we discuss connections between harmonic functions, minimal surfaces and how interior data facilitates the reconstruction of interior anisotropic conductivity tensors. This is joint work with A. Moradifam and A. Nachman.