
ALEXANDRU TAMASAN, University of Central Florida

Recent progress in Current Density Impedance Imaging

Current Density Impedance Imaging refers to the inverse problem of conductivity imaging, when some knowledge of the current density field is known inside. When only the magnitude of one current density field is available, the mathematical problem reduces to solving a boundary value problem associated with the one-Laplacian. I will present some recent results on the Dirichlet problem based on joint works with Amir Moradifam (Columbia U) and Adrian Nachman (U Toronto), and Gregory Spradlin (Embry-Riddle U).