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Francis J Chung* (fj.chung@uky.edu). *Optical Tomography with Local Data.*

Optical tomography is the problem of reconstructing interior properties of an object from optical measurements at the boundary. The mathematical version of this is a classic inverse problem of reconstructing the coefficients of a PDE from measurements of the solutions at the boundary. In this talk I'll discuss an optical tomography problem with local data, in which measurements are restricted to a subset of the boundary. I plan to introduce the problem, discuss the wider context, and describe a recent result. (Received January 20, 2022)