Broken ray tomography and related inverse problems

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In X-ray tomography one wants to recover a function in a domain from its integral over all lines. In broken ray tomography the lines are replaced with broken rays which reflect on a part of the boundary of the domain. This is can be seen as a partial data version of the X-ray tomography problem and it is indeed related to Calderon’s problem with partial data. I will discuss possible approaches to the broken ray tomography problem, its relation to other inverse problems and recent results.

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