

Discussion of the paper by M. Choulli and P. Stefanov: "Inverse scattering and inverse boundary value problems for the linear Boltzmann equation", Comm. P.D.E., 21 (1996), 763-785

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April 24, 2006

The paper discusses two - related - inverse problems for the linear Boltzmann equation (the dynamical one). The first one is a method to recover the coefficients of this integro-differential equation from the scattering operator. Since there is a relation between the albedo operator and the scattering operator if the underlying set is convex, we instantly gain a recovery process for the coefficients if we know only the former. Moreover, this paper shows, that even if the underlying set is not convex there is a way to solve the second inverse problem, which is to recover the coefficients from the albedo operator without calculating the scattering operator.