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Partial data inverse problems for the nonlinear magnetic Schrodinger equation

In this talk, we will discuss unique determination of the nonlinear coefficients in the dynamic nonlinear magnetic Schrodinger equation from the knowledge of the Dirichlet-to-Neumann map measured on an arbitrary part of the boundary. The main tool is the construction of special solutions to the linearized Schrodinger equation, which is obtained from the linearization process.