ALLAN GREENLEAF, University of Rochester, Department of Mathematics, Rochester, NY 14627, USA Counterexamples to Calderón's problem as the mathematics of invisibility

We show how earlier work on counterexamples for the Calderón problem (*i.e.*, whether a conductivity function or tensor $\sigma(x)$ on a domain Ω is determined by the boundary values of the solutions to $\nabla \cdot (\sigma \nabla) u = 0$) can be extended to obtain rigorous results concerning invisibility (or "cloaking") for solutions of the Helmholtz and Maxwell equations.

This is joint work with Yaroslav Kurylev, Matti Lassas and Gunther Uhlmann.