

## Reconstruction of inclusions and cracks in Calderón's inverse conductivity problem

*mercredi 14 juin 2023 09:15 (1 heure)*

I will talk about the exact reconstruction of general inclusions in Calderón's inverse conductivity problem from boundary electrical measurements in the form of a local Neumann-to-Dirichlet map. Here "inclusion" means the support of perturbations to a known conductivity coefficient.

I will briefly cover the cases on open sets, where the perturbed coefficient can have finite positive and negative perturbations, can have perfectly conducting parts and have perfectly insulating parts, and may also have parts given as restrictions of Muckenhoupt coefficients with singular and degenerate behavior (enabling continuous growth to infinity or decay to zero).

I will give a more detailed account of new results on reconstructing general cracks given as unions of Lipschitz hypersurfaces, including both perfectly conducting and perfectly insulating cracks.

**Orateur:** GARDE, Henrik