

INdAM Workshop  
*Inverse Problems and Applications*

June 3–9, 2002 - Cortona, Italy  
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ELENA BERETTA

Università degli Studi di Roma "La Sapienza", Italy

***Asymptotic expansions of the steady-state voltage potential in the presence of thin inhomogeneities***

Joint work with E. Francini and M. Vogelius

We derive rigorously asymptotic expansions for the steady-state voltage potential in the presence of a finite number of thin inhomogeneities. We use these formulae to establish uniqueness results in the identification of the inhomogeneities from boundary measurements.