

Refinement indicators: Theory and application

H. Ben Ameer, *Université de Tunis, Tunisia*

Abstract

An important step in the resolution of inverse problems is the choice of a parametrization of the unknown quantity that we have to identify. The idea of using refinement and coarsening indicators to define an adaptive progressing parametrization was first applied to identify hydraulic transmissivity in porous media. This technique can be applied in the general case where we want to locate discontinuities of some parameters. In a current work, this technique is applied for image segmentation, the obtained results are promising.