Title: Stability and reconstruction in inverse problems.

Abstract: We discuss the issues of stability and reconstruction in inverse problems. Given their ill-posed (and often non-linear) nature, it is necessary to reformulate the issue of stability, the continuous dependence of the relevant physical parameter (to be determined) on the data, within the theory of ill-posed problems. This requires the imposition of *a-priori* information on the unknown parameter that is physically meaningful to the application in mind and that allows to restore stability in the inverse problem in question. As is well known, the matter of stability is of fundamental importance in the reliability of any reconstruction procedure of the physical parameter since, in practice, the data/measurements of the problem will be affected by errors.