Seminario de Matemática Aplicada

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"PRIMAL CONVERGENCE OF A HYBRID ALGORITM COUPLED WITH APPROXIMATION METHODS IN CONVEX OPTIMIZATION"

The aim of this talk is to present some theorical results on the convergence of the Hybrids Algorithm . The motivation for introducing this algorithm is to find the minimum of a function 'f' approximated by a sequence of functions 'fk'. In the first part of this talk , we will give some general results and the first converge result will be stated. For example, the sequence 'fk' corresponding to the Thikonov regularization of 'f' satisfies the hypothesis of this theorem. Unfortunately, some assumptions involved in this result prevent it from being used in some other classical cases.

Consequently, in a second part, we will study the case of a parametrized approximation of 'f'. The main assumption will be the existence of an absolute continuous optimal path with finite length. Two ways of parametrization, a slow one and a fast one, will be studied. In both cases , the convergence of the algorithm will be proved. To conclude, we shall mention some open problems.

Organizado por el Departamento de Matemática Aplicada de la UCM, el Grupo MOMAT y el IMI.

Fecha: Jueves 16 de julio, a las 12.00 horas
**Seminario Alberto Dou (aula 209)
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