

SEMINARIO

OPTIMIZATION AND EQUILIBRIUM

Speaker:

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Title:

Farkas' lemma: some extensions and applications

Abstract:

The classical Farkas' lemma characterizing the linear inequalities which are consequence of an ordinary linear system was proved in 1902 by this Hungarian Physicist to justify the first order necessary optimality condition for nonlinear programming problems stated by Ostrogradski in 1838. At present, any result characterizing the containment of the solution set of a given system in the sublevel sets of a given function is said to be a Farkas-type lemma. These results provide partial answers to the so-called containment problem, consisting in characterizing the inclusion of a given set into another one. In this talk we present different Farkas-type lemmas, in finite and infinite dimensional spaces, involving scalar and vector functions. We also discuss their applications in semi-infinite and infinite optimization.

MIÉRCOLES 15 DE MAYO A LAS 16:00 HRS, SALA DE SEMINARIOS JOHN VON NEUMANN CMM,
SÉPTIMO PISO, TORRE NORTE, DE BEAUCHEF 851.