Sessão W5: Invited Session and Continuous Optimization

24 de Julho, Quarta-feira, 9:00 - 10:30
Sessão em Inglês
Sala: B259

Moderadora: Tatiana Tchemisova

Immobile indices in linear Semi-infinite and Copositive Programming

<u>Tatiana Tchemisova</u>, Olga Kostyukova

Resumo. Semi Infinite Programming (SIP) deals with problems of minimization of a cost function in a finite dimensional space subject to an infinite number of constraints. The notion of immobile indices was first introduced in SIP to denote the indices of the constraint that stay active for all feasible solutions. It is a known fact that the immobile indices play an important role in study of properties of the feasible sets and permit to deduce efficient optimality conditions which do need use any Constrain Qualifications (CQs). A linear problem of Copositive Programming consists in minimization of a linear function subject to linear constraints defined in a conic (infinite) index set. Using the equivalent formulation of the linear copositive problem in the form of a convex SIP problem and basing on the immobile indices of constraints of the last, we obtain new optimality conditions that do not need any additional conditions for constraints or CQs.