

Palestrante: Prof. Adilson Elias Xavier (COPPE/UFRJ)

Título da Palestra: Solving very Large Clustering Problems by Using the Hyperbolic Smoothing Method

Resumo da Palestra:

Clustering analysis can be done according to numerous criteria, through different mathematical methodologies. The methodology, called hyperbolic smoothing, has a wider scope, and can be applied to clustering problems. The talk will consider one particular clustering formulation: Among many criteria, the most natural, in order to show the distribution of data points, a set of computational results obtained.



Short Bio:

Adilson Elias Xavier is a Professor of the Federal University of Rio de Janeiro (UFRJ), whose main interests rely on Mathematical Programming, particularly Nonlinear Programming in Penalty and Augmented Lagrangian Methods. He earned his D.Sc. on Systems Engineering and Computing at UFRJ in 1992. He is the author of the Hyperbolic Penalty method for Nonlinear Programming and the Hyperbolic Smoothing modeling technique, which has been applied for solving important non-differentiable problems, such as: covering, packing, clustering or location, having obtained unprecedented computational results. He has been working as consultant in many projects with some of the most important Brazilian companies, such as Petrobras, CEPEL, Eletrobras, ONS, Furnas and Embratel. He earned prizes from SOBRAPO (Brazilian Operations Research Society) and IFORS (International of Operational Research Societies).