Courant Institute of Mathematical Sciences
Mathematics Colloquium
April 14, 2014

Speaker: Michele Pavon, Università di Padova

Title: On the geometry of maximum entropy problems

Abstract:

We show that a simple geometric result suffices to derive the form of the optimal solution in a large class of finite and infinite-dimensional maximum entropy problems concerning probability distributions, spectral densities and covariance matrices. These include Burg's spectral estimation method and Dempster's covariance completion, as well as various recent generalizations of the above.