



ΠΑΝΕΠΙΣΤΗΜΙΟ ΙΩΑΝΝΙΝΩΝ

ΤΜΗΜΑ ΜΑΘΗΜΑΤΙΚΩΝ



Εβδομαδιαίο Σεμινάριο

SOME RECENT ADVANCES ON MODELLING SPHERICAL DATA

Μιχαήλ Τσαγρής

Τμήμα Οικονομικών Επιστημών, Πανεπιστήμιο Κρήτης

Directional data arise in many fields including biology, ecology, geology, geophysics, criminology, medicine. The Kent distribution is an important subfamily of the general Fisher-Bingham distribution which has elliptical contours. I will present an analogous subfamily of the general Angular Gaussian distribution, called Elliptically Symmetric Angular Gaussian (ESAG) distribution. In contrast to the Kent distribution, ESAG's density can be computed exactly and random values generation is straightforward. I will also present spherical regression without assuming rotational symmetry (the analogue of independence in the bivariate normal in \mathbb{R}^2) and close the talk showing some recent results on discriminant analysis comparing rotational to non-rotational symmetric distributions.

Πέμπτη 28 Νοεμβρίου 2019, 09:00

Αίθουσα 201α Τμήματος Μαθηματικών

Μετά την ομιλία ακολουθεί καφές και συζήτηση στο εντευκτήριο του Τμήματος