



## Thematic Session

**Session title:** Harmonic analysis, orthogonal expansions and Dunkl theory

**Organizers:**

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**Description of the topic:**

This session is devoted to current developments in harmonic analysis related to orthogonal expansions and special functions, in interplay with the analysis on Lie groups/symmetric spaces and partial differential equations.

The aim of the session is to stimulate the interaction between various directions of research in these fields. Several leading experts will be invited to give expository lectures accessible to younger researchers and PhD students.

The topics covered shall include: orthogonal expansions in one and several variables, Dunkl-Cherednik theory and special functions associated with root systems, PDEs on symmetric spaces, Hardy spaces, spectral multipliers and potential theory, convolution algebras, as well as applications such as probabilistic limit theorems.

**2011 Mathematic Subject Classification:**

42C, 33C, 43A