



Thematic Session

Session title: Functional Analysis: relations to Complex Analysis and PDE

Organizers:

Paweł Domański, Adam Mickiewicz University, Poland, domanski@amu.edu.pl

Michael Langenbruch, Universität Oldenburg, Germany,
michael.langenbruch@uni-oldenburg.de

Description of the topic:

The session will be devoted to recent developments in the theory of Fréchet spaces (and more general locally convex spaces appearing naturally in analysis) as well as linear operators acting on them and their applications and relations to complex analysis and partial differential operators. The topics covered will include operators on spaces of smooth functions, holomorphic functions, real analytic functions, quasianalytic classes and various spaces of distributions. We concentrate on partial differential operators, convolution operators, composition operators, multiplication operators and analytic functionals. We will discuss spectral properties, dynamical properties (like hypercyclicity), surjectivity (for instance, solvability of various linear pde also with variable coefficients) etc.

2011 Mathematic Subject Classification:

46E, 47A, 35A