

Thematic Session

Session title: Physics and Differential Topology

Organizers:

Torsten Asselmeyer-Maluga, German Aerospace Center, torsten.asselmeyer-maluga@dlr.de

Boguslaw Hajduk, Wroclaw University, bhmath@interia.pl

Aleksy Tralle, University of Warmia and Mazury, tralle@matman.uwm.edu.pl

Jerzy Król, Silesian University, Katowice, iriking@wp.pl

Description of the topic:

The aim of this meeting is to bring together physicists and mathematicians whose research concentrates on looking for relations between smooth structures on manifolds and their geometry, as well as physical interpretation of the discovered phenomena. In particular the following topics are planned:

- global gravitational anomalies and their symplectic analogues
- symplectic Yang-Mills theory
- exotic smooth structures and symplectic geometry
- field theories on exotic manifolds

2011 Mathematic Subject Classification:

53,57,81, 83