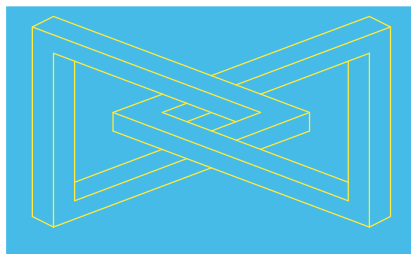


**Polskie Towarzystwo Matematyczne – Oddział Warszawski**  
**Instytut Matematyczny Polskiej Akademii Nauk**  
**Międzynarodowe Centrum Matematyczne im. Stefana Banacha**

zapraszają na



wykład–kolokwium

W czwartek, 31 lipca 2014 roku o godz. 16.30  
w Centrum Banacha, ul. Śniadeckich 8, sala 321

**Andrei Gabrielov** (Purdue University, USA)

wygłosi wykład

***Classification of spherical quadrilaterals***

A spherical quadrilateral (membrane) is a bordered surface homeomorphic to a closed disc, with four distinguished boundary points called corners, equipped with a Riemannian metric of constant curvature 1, except at the corners, and such that the boundary arcs between the corners are geodesic. We discuss the problem of classification of these quadrilaterals and perform the classification up to isometry in the case that at most two angles at the corners are not multiples of  $\pi$ . This is a very old problem, related to the properties of solutions of the Heun's equation (an ordinary differential equation with four regular singular points). The corresponding problem for the spherical triangles, related to the properties of solutions of the hypergeometric equation, has been solved by Klein, with some gaps in Klein's classification filled in by Eremenko in 2004. The quadrilateral case for small corners was treated in the Thesis of Smirnov (1918), but for arbitrary corners remains open. This is joint work with A. Eremenko (Purdue) and V. Tarasov (IUPUI).

Przed wykładem, od godz. 16.00, zapraszamy na spotkanie przy kawie i herbacie w sali klubowej.

Organizatorzy