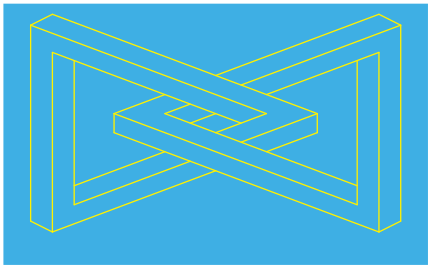
Polskie Towarzystwo Matematyczne – Oddział Warszawski
Instytut Matematyczny Polskiej Akademii Nauk
Międzynarodowe Centrum Matematyczne im. Stefana Banacha

zapraszają na



wykład–kolokwium

W czwartek, 5 czerwca 2014 roku o godz. 16.30

w Centrum Banacha, ul. Śniadeckich 8, sala 321

Robert Bryant (Duke University, USA)

wygłosi wykład

The geometry of periodic equi-areal sequences

A sequence of functions $f = (f_i)$ $(-\infty < i < \infty)$ on a surface S is said to be *equi-areal* (or sometimes, *equi-Poisson*) if it satisfies the relations

$$df_{i-1} \wedge df_i = df_i \wedge df_{i+1} \ (\neq 0)$$

for all i. In other words, each successive pair (f_i, f_{i+1}) are local coordinates on S that induce the same area form on S, independently of i.
One says that f is *n-periodic* if $f_i = f_{i+n}$ for all i. The n-periodic equi-areal sequences for low values of n turn out to have close connections with interesting problems in both dynamical systems and in the theory of cluster algebras.
In this talk, I will explain what is known about the classification (up to a natural notion of equivalence) of such periodic sequences and their surprising relationships with differential geometry, cluster algebras, and the theory of over determined differential equations.

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

Organizatorzy