

**Adam Mickiewicz University**  
**Faculty of Mathematics and Computer Science**

**GEOMETRY AND TOPOLOGY SEMINAR**

11 AM, Friday, Nov 25, 2016  
B1-37, Collegium Mathematicum

**Speaker:** Aleksandra Franc (University of Ljubljana)

**Title:** Algorithmic approach to topological complexity

**Abstract:**

Our goal is to produce an algorithm that for a given simplicial complex  $X$  constructs an optimal motion planner on  $X \times X$ . We will show a few examples of the results the algorithm produces on spheres, torus, Klein bottle, projective plane and other 2-dimensional surfaces.