

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

**GEOMETRY AND TOPOLOGY SEMINAR**

10 AM, Friday, Jan 15, 2016  
B1-37, Collegium Mathematicum

**Speaker:** Maria Marchwicka (Adam Mickiewicz University)

**Title:** Topological approach to enzymology

**Abstract:**

In this talk I will present how certain methods of topology and geometry can be used to study enzyme mechanism. We will start with a review of the structure and topology of DNA. Next we will study action of certain enzymes (topoisomerases and site specific recombinases) on circular DNA. In the last part of the talk I will show how the enzyme mechanism can be characterised by observing changes in DNA geometry (supercoiling) and topology (knotting and linking).