

# GEOMETRY AND ANALYSIS IN FUNCTION AND MAPPING THEORY ON EUCLIDEAN AND METRIC MEASURE SPACES

**Polskie Towarzystwo Matematyczne - Oddział Warszawski**  
**Instytut Matematyczny PAN**  
**Międzynarodowe Centrum Matematyczne im. Stefana Banacha**

zapraszają na colloquium

**Pekka Koskela (Jyväskylä University)**

***Functional properties of Sobolev extensions***

3 października 2019, godz. 14:15, sala 321

Przed colloquium, o godz. 13:45, zapraszamy na kawę  
i herbatę w sali klubowej (409)

## **Abstract:**

A given domain (open and connected set) in a Euclidean space may or may not have the property that each function in a Sobolev space defined over the domain is actually the restriction of a function in the analogous Sobolev space to the domain in question. In the positive case, there is a bounded extension operator. I will discuss results related to the dependence of this extension property on the integrability degree and on the number of derivatives in the definition of the chosen Sobolev space. I will also give the other known functional properties for this kind of extendability. A number of open problems and conjectures get stated.

ORGANIZERS: Tomasz Adamowicz • Tomasz Cieślak • Antoni Kijowski • Nageswari Shanmugalingam • Marta Szumańska



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