Mathematical Institute
Polish Academy of Sciences

COURSE DESCRIPTION

Course Name	Singularity Theory
Course Type	research seminar (sd)
Supervisor	Stanisław Janeczko
ECTS credit allocation	1 – IM PAN Ph. D. program; 3 recommended for MA programs
Duration	One semester
Number of hours	30
Language	English or Polish, if every participant speaks Polish
Prerequisites	
Course content	-topics in singularity theory and related topics -symplectic geometry, symplectic invariants, singularities in symplectic geometry - algebraic geometry methods, geometry of semi-algebraic and sub-analytic sets - singularities of differential forms and differential mappings.
Recommended reading	1, V. Arnold, A. Varchenko, S. Gusein-Zade. Singularities of differential maps. v. 1, Birkh¨auser, Basel, 1985. 2. Singularity theory: proceedings of the 2005 Marseille Singularity School and Conference: CIRM, Marseille, France, 24 January-25 February. Ed. D. Cheniot, N. Dutertre, C. Murolo, D. Trotman, A. Pichon. World Scientific, 2007.
Learning outcomes	The student should acquire familiarity with recent results in the field
Assessment methods and criteria	Based on the presentation given at the seminar
Remarks	