## Mathematical Institute Polish Academy of Sciences

## **COURSE DESCRIPTION**

Course name	Harmonic analysis and orthogonal expansions
Course type	research seminar (sd)
Supervisor	Adam Nowak
ECTS credit allocation	1 – SD IM PAN program; 3 recommended for MA programs
Duration	One semester
Number of hours	30
Language	English or Polish, if every participant speaks Polish
Prerequisites	Basic knowledge of harmonic analysis
Course content	The aim of this research seminar is to present and discuss recent harmonic analysis results obtained by its participants and invited guests.
Recommended reading	J. Duoandikoetxea, Fourier Analysis, American Mathematical Society, Providence, 2001.
Learning outcomes	Knows the aspects of harmonic analysis which are discussed at the seminar, their mutual relationships, as well as location of the problems under consideration in a more general theory and relation to selected open problems.
	Knows limitations on his own and existing knowledge of the problems discussed at the seminar, and understands the need and possibilities of further developments.
	Can interact with other participants of the seminar, in particular can discuss problems under consideration and share with his own thoughts.
Assessment methods and criteria	Grade based on talks given and other activities at the seminar.
Remarks	-