Prelegent	**Benjamin Weiss** (Einstein Institute of Mathematics, Hebrew University of Jerusalem)
Tytuł	**Ergodic theory of actions of countable groups**
Termin	20-28 stycznia 2015
Wymiar godzin	15 godzin
Rozkład godzin [Schedule]	20.01, 27.01, wt. 10-12, s. 0009 [20 and 26 Jan (Tu), 10-12AM, room 0009] 21.01, 28.01, śr. 16-18, s. 1016 [21 and 28 Jan (We), 4-6PM, room 1016] 22.01, czw. 12-14, s. 0094 [22 Jan (Th), 12AM-2PM, room 0094] 23.01, pt. 10-12, s. 0106 [23 Jan (Fr), 10-12AM, room 0106] 26.01, pon. 14-16, s. 0106 [26 Jan (Mo), 2-4PM, room 0106] All lectures will take place at the Faculty of Mathematics and Computer Science, Jagiellonian University in Krakow, ulica (street) Lojasiewicza 6
Biogram wkładowcy	**Bio:** Benjamin Weiss is an Israeli mathematician working in the areas of dynamical systems, probability theory, ergodic theory, and topological dynamics. Weiss earned his Ph.D. from Princeton University in 1965, under the supervision of William Feller. He is a professor emeritus of mathematics at the Hebrew University of Jerusalem, where Fields Medalist Elon Lindenstrauss was one of his students. Since 2000 Benjamin Weiss is an Honorary Foreign member of the American Academy of Arts and Sciences. In 2012 he became a fellow of the American Mathematical Society in recognition of his outstanding contributions to the creation, exposition, advancement, communication, and utilization of mathematics.
Opis	**Abstract:** After an introduction to the main classes of groups that will be discussed - amenable, residually finite and sofic - we will survey the ergodic theory of their actions as measure preserving transformations. The emphasis will be on the theory of entropy and Bernoulli shifts. 1-2. Amenable, residually finite and sofic groups. 3-4. Ergodic theorems and the "Rohlin lemma" for amenable groups. 5-6. Sofic groups and surjunctivity. 7-8. Entropy for amenable groups and Bernoulli shifts. 9-12. Entropy for sofic groups - "Kolmogorov's theorem". 13-15. A survey of some recent developments. References. 1. B. Weiss, Sofic groups and dynamical systems, Sankhya - Indian J. of Statistics, Series A 62 (2000), Special Issue on Ergodic Theory and Harmonic Analysis, 350-359. 2. B. Weiss, Actions of amenable groups, in Topics in Dynamics and Ergodic Theory, ed. by Sergey Bezuglyi and Sergiy Kolyada, London Math. Soc. Lecture Note Series 310 (2003), 226-262. 3. L. Bowen, Measure conjugacy invariants for actions of countable sofic groups. J. Amer. Math. Soc. 23 (2010), 217-245.