Prof. dr hab. Janusz Matkowski

Propozycja wykładu dla uczestników studiów doktoranckich w semestrze letnim roku akademickiego 2014/2015:

Functional equations and inequalities

Program:

All types the Cauchy functional equation; functional equations on the restricted domains; Homogeneous functions.

Means and convex functions with respect to a mean; homogeneous means; geometrical convexity, harmonic convexity; convexity with respect to a quasi-arithmetic mean.

Mean-type mappings and their iterations; invariant means; generalized weighted quasi-arithmetic means.

Some special functional equations in a single variable. Euler Gamma function; Bohr-Mollerup theorem and its generalization.

Literature

1. M. Kuczma, Functional equations in a single variable, Monografie Matematyczne, PWN, Warszawa 1968.

2. J. Aczél, Lectures on Functional equations and their applications, Academic Press, New York and London, 1966.