

Bernstein-type inequalities and geometric function theory

09.01**Sergei Kalmykov***(Shanghai Jiao Tong University, Shanghai, China)***Time:** Wednesday 24.07., 10:30 - 11:00, Room HS 4

Abstract: We will mainly discuss results concerning Bernstein- and Markov-type inequalities for polynomials and rational functions with restriction on zeros or curved majorants on the interval $[-1, 1]$ or an arc. Methods of proofs are based on applying geometric function theory of complex variables. Special attention will be paid to cases of equality, construction of extremal polynomials and rational functions and mapping properties of these functions.