

**Sergei Artamonov**

*National Research University Higher School of Economics, Russia*

**Quality of approximation by families of generalized sampling series  
in terms of generalized moduli of smoothness**

In this talk we consider  $L_p(\mathbb{R})$  spaces, where  $p > 0$ . We study properties of generalized moduli of smoothness in non-periodic case. The main result is the chain of equivalencies of the form 'the error of approximation by families of generalized sampling series – realizations of K-functionals – generalized moduli of smoothness'.