

PRV and GRT

**Valerii V. Buldygin (Kiev), Karl-Heinz Indlekofer (Paderborn),
Oleg I. Klesov (Kiev), and Josef G. Steinebach (Cologne)**

Abstract: We present some recent results from the theory of O -regularly varying (ORV) functions and their applications in probability theory. Several subclasses of ORV functions are discussed and, in particular, their role in *generalized renewal* theory (GRT) is exhibited.

Special attention is paid to the class of (so-called) *pseudo-regularly varying* (PRV) functions, which appear as normalizations in equivalence theorems on strong laws of large numbers for partial sums and renewal processes.

We also mention some other applications concerning the problem of asymptotic equivalence of solutions of stochastic differential equations and their corresponding ordinary differential equations.