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SURVEY ON TRANSLATIONAL REGULARLY VARYING FUNCTIONS

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Abstract. In this paper we introduce three new classes of functions under names translational slowly varying, translational regularly varying and translational rapidly varying functions. All classes have important applications in the study of asymptotic processes. In this sense, Uniform Convergence Theorem, Characterization Theorem and Representation Theorem are the main results of this paper.

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Key words. Translational slowly varying function, Translational regularly varying function, uniform convergence, characterization, representation, Slowly varying function, Regularly varying function, Karamata's theory, translational rapidly varying functions, translational slowly varying functions with remainder term.

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Dedicated to adventure in year 1930 when Jovan Karamata published in Mathematica (Cluj) a survey on regularly varying functions.

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