On especial cases of Boas-Buck type polynomial sequences

Ana F. Loureiro* and S. Yakubovich[†]

Abstract

After a slight modification, the Kontorovich-Lebedev transform is an automorphism in the vector space of polynomials. The action of this transformation over especial cases of Boas-Buck type polynomial sequences is under analysis.

Keywords. Boas-Buck polynomial sequences, generating functions, Kontorovich-Lebedev transform, Meijer G-function.

^{*}School of Mathematics, Statistics Actuarial Science (SMSAS), Cornwallis Building, University of Kent, Canterbury, Kent CT2 7NF, United Kingdom, E-mail: A.Loureiro@kent.ac.uk

[†]Department of Pure Mathematics, Faculty of Sciences, University of Porto, Campo Alegre st., 687 4169-007 Porto, Portugal, E-mail: syakubov@fc.up.pt