

ON NONORTHOGONAL POLYNOMIALS GENERATED BY
CLASSICAL FORMS

A. F. Loureiro and P. Maroni

Center of Mathematics

University of Porto

Rua do Campo Alegre, 687; 4169-007 Porto, Portugal

anafsl@fc.up.pt

A polynomial sequence generated by powers of certain first order differential operators will be under discussion. Despite their non-regular orthogonality, the corresponding canonical element of its dual sequence is a classical form of Hermite, Laguerre, Bessel and Jacobi. They will be thoroughly characterized.