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ASYMPTOTICS OF POLYNOMIAL SOLUTIONS OF A CLASS OF GENERALIZED LAMÉ DIFFERENTIAL EQUATIONS*

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Abstract. In this paper we study the asymptotic behavior of sequences of Heine-Stieltjes and Van Vleck polynomials for a class of generalized Lamé differential equations connected with certain equilibrium problems on the unit circle.

Key words. Heine-Stieltjes polynomials, Van Vleck polynomials, zeros, asymptotics.

AMS subject classifications. 33C45.

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