MILOŠ TATER

(ÚJF AV ČR, Řež)

Asymptotic zero distributions
of polynomials of the Heun equation

Abstrakt

We solve the classical (multi)spectral problem for the Heun equation suggested by E. Heine and T. Stieltjes in the 19th century. We study asymptotic behaviour of roots of both Van Vleck and Stieltjes polynomials. Existence of the asymptotic measures is proved and their supports are characterized. Based on the electrostatic interpretation of zeros of Stieltjes polynomials we show a possible application in the uni- and bivariate polynomial approximation problems.

**Seminář se koná v pátek 13. 11. 2009 v 10:30 hod.
v zasedací místnosti ÚJF Řež**

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