



Der Wissenschaftsfonds.



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Einladung

zum Vortrag im Rahmen des **SFB Colloquiums** (Standort Linz), mit dem Titel

Asymptotic Expansion of the Zeros of the Lerch Zeta Function

VORTRAGENDER: **Roland Paulin**, Universität Salzburg

DATUM: Mittwoch, 20. Jänner 2016

ZEIT: 13:00 Uhr

ORT: TNF-Turm, HS 14, JKU Linz

Abstract: We discuss the asymptotic behavior of the zeros s of the Lerch zeta function $L(\lambda, \alpha, s) = \sum_{n=0}^{\infty} \frac{e^{2\pi i \lambda n}}{(n+\alpha)^s}$ when $z = e^{2\pi i \lambda} \rightarrow 0$. In particular we define recursively a series expansion, and we also give an explicit, non-recursive formula for the coefficients. The obtained results considerably strengthen some of the statements of a 1975 paper of Fornberg and Kölbig. The methods used are quite general, and can be applied to describe the asymptotic behavior of the zeros of a wide class of general Dirichlet series.

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