



## Mathematisches Kolloquium

# The method of similar operators in the spectral analysis of perturbed operator matrices

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Herr Prof. Dr. Krishtal verweilt derzeit im Rahmen der Förderlinie „Fellowship for KU Visiting Scholars“ an der KU Eichstätt.

Abstract:

We describe a construction that allows one to obtain useful similar operators for a large class of perturbations of unbounded operator matrices. As a result, one gets good asymptotic estimates for the spectrum of Dirac operators, Hill operators, differential operators with an involution, and other operators that describe various physical phenomena and appear in applications, such as the filtering and prediction theory and the study of subharmonic oscillations. The estimates follow via representing the obtained similar operators as block-diagonal infinite operator matrices. The results are based on the joint work with A. Baskakov and N. Uskova

**Mittwoch, 24.10.2018**, KG I/Bau A 103, 17.00 Uhr s.t.  
Um 16.30 Uhr werden im selben Raum Kaffee und Tee serviert.