



universität  
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Fakultät für Mathematik

## Mathematisches Kolloquium

Mittwoch, 19. März 2025

Sky Lounge

### EINLADUNG

Ioannis Karatzas

(Columbia University)

### „A Hereditary Hsu-Robbins-Erdös Law of Large Numbers“

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#### **Abstract:**

More than seventy-five years ago, these three authors proved a remarkable variant of Kolmogorov's Law of Large Numbers: a sequence of I.I.D. random variables  $f_1, f_2, \dots$  is in  $L^2$  if, and only if, its Cesaro averages converge ``completely'' to the expectation of  $f_1$ . We prove an extension of this result from the I.I.D. case to the case of general sequences  $f_1, f_2, \dots$  in the spirit of the Komlos theorem pertaining to sequences bounded in  $L^1$ .

**16.45 Uhr: Vortrag**

Walter Schachermayer  
Radu Ioan Boț