



**The Jacobs Center  
Research Seminar Series**

*PROF. DR. ROLAND H. GRABNER*

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Austria

## **The educational neuroscience of mathematical development**

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There is increasing awareness and evidence that mathematical competencies are key cognitive abilities in modern technological societies and an important form of literacy that promotes life success. Poor mathematical skills place a heavy burden on the individual and represent a major cost to nations. In light of their paramount importance, mathematical competencies and ways to foster them have become a lively and exciting area research in the past decade. A particularly promising research approach comes from educational neuroscience, which is characterized by an interdisciplinary (in particular linking psychology, neuroscience, and education) and multi-methodological (combining psychometric, behavioral, neuroscientific, and educational methods) perspective. In this talk, Prof. Grabner will first outline the opportunities and limitations of educational neuroscience and provide an overview of his research in the domain of mathematics. He will then describe his current endeavors to develop a comprehensive and integrative model of mathematical development from early childhood to young adulthood.

**Tuesday, December 12, 2017, 10:30 h**

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