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**Directorate of studies
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Natural Sciences**

<http://ssc-physik.univie.ac.at>

Univ.-Prof. Mag. Dr. Thomas Pichler
Boltzmannngasse 5, 1090 Vienna

Phone +43(1) 4277 51466
dspl.physics@univie.ac.at

To all members of the
Faculty of Physics

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Invitation to the public defense of the doctoral thesis

Diffusion modeling of language shift in Austria(-Hungary)

by

Katharina Prochazka

Wednesday, 24 April 2019, 10.30 a.m.

Josef Stefan lecture hall, 3rd floor, Boltzmannngasse 5, 1090 Vienna

Language as part of our culture and identity is constantly changing. Likewise, language use is changing: people sometimes stop using one language and shift to another. But what causes such a language shift? This thesis explores this question from a new perspective: through the application of methods from physics, it aims to describe the process and give an explanation. To do so, language shift is interpreted as a diffusion process. This linguistic diffusion (spread of languages) and the resulting language shift are explored in analogy to physical diffusion (spread of atoms). A mathematical model for language shift is developed using a microscopic approach to simulate the behavior of individual settlements, just like the behavior of individual atoms can be simulated. With the help of the model, the influence of various factors on language shift is examined for two language contact situations in Austria-Hungary and today's Austria and Hungary.

Defense committee:

Jörg Kärger, Universität Leipzig, DEU (reviewer)

Emmerich Kelih (examiner)

Gero Vogl (supervisor)

Manfred Glauningner (supervisor)

Thomas Pichler (chair)