



Julius-Maximilians-

**UNIVERSITÄT
WÜRZBURG**



Institut für
MATHEMATIK

Chair of Mathematics VIII (Applied Stochastics)

Oberseminar Stochastik

Im Rahmen des Oberseminars Stochastik wird

Prof. Olga Aryasova

(Institute of Geophysics National Academy of Sciences of Ukraine and
Friedrich-Schiller-Universität Jena)

am

Mittwoch, den 12. Juli 2023

über das Thema

**“HOMOGENIZATION OF A MULTIVARIATE DIFFUSION WITH
SEMIPERMEABLE REFLECTING INTERFACE”**

vortragen.

Abstract: We study the homogenization problem for a multivariate stochastic differential equation with local time terms that models a diffusion in presence of semipermeable hyperplane interfaces with oblique reflection. We show that this system has a unique weak solution and determine its weak limit as the distances between the interfaces converge to zero. In the limit, the singular local times terms vanish and give rise to an additional regular drift.

Der Vortrag findet um **17:00 Uhr s.t. (Dauer max. 1 Stunde)** im Raum 30.02.003 statt.
Alle Interessenten sind herzlich eingeladen!

gez.:

Prof. Dr. Markus Bibinger
PD Dr. habil. Anton Klimovsky