Oberseminar Numerik

**Frau Dr. Danica Basaric
(Academy of Sciences, Prague, Czech Republic)**

**14.10.2021
10:15 Uhr
MS Teams**

**Im Hilbertraum 05-432
Staudingerweg 9, 55128 Mainz**

Semiflow Selection in Fluid Dynamics

Abstract:

Well-posedness of systems describing the motion of fluids in the class of strong and weak solutions represents one of the most challenging problems in the modern theory of partial differential equations. To handle the problem of uniqueness, one possible way is to perform a semiflow selection, identifying, among all the solutions emanating from the same initial data, the one satisfying the semigroup property. We study under which assumptions it is possible to guarantee the existence of a semiflow selection, choosing the Skorokhod space of càglàd functions as trajectory space. Subsequently, we apply this abstract machinery to systems arising in fluid dynamics, including the compressible Navier-Stokes system and models describing general non-Newtonian fluids

Hierzu sind alle herzlich eingeladen.

Es gilt die 3G-Regel

JOHANNES GUTENBERG UNIVERSITÄT MAINZ

JG|U