

having a coffee in a Banach space makes you feel complete

Vortragsankündigung Oberseminar Sommersemester 2018

15:00 Uhr im Banachraum 7.133

14.05.2018 **Lars von Wolff** (Universität Stuttgart)

Homogenization of Compressible Two-Phase Flow in Porous Media

Abstract: We study the homogenization of a non-local Navier–Stokes–Korteweg system in a periodic porous medium with Dirichlet boundary conditions. Models of the Navier–Stokes–Korteweg class are used to describe the isothermal dynamics of a fluid that can occur in two phases and allow for phase transitions. In the limit we obtain a non-local Cahn–Hilliard system.

Alle Interessenten sind herzlich eingeladen!

$$\|U - u\|_W \lesssim \left(\sum_{E \in \mathcal{E}_G} \mathcal{E}_G^2(U; E) \right)^{1/2}$$

$$\partial_t u + \operatorname{div}_x f(u) = 0$$

```

39 typedef Dune::ACFem::MassModel<EllipticModelType> MassModelType;
40 MassModelType bareMassModel(implicitEllipticModel);
41
42 auto massModel(mu * (mat.Z_a) * J + mat.Z_w) * bareMassModel);

```

Die Professoren des Instituts für Angewandte Analysis und Numerische Simulation

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