

Mathematisches Institut
der Universität Bayreuth

Prof. Dr. V. Aizinger Prof. Dr. M. Bebendorf
Prof. Dr. K. Chudej Prof. Dr. L. Grüne
Prof. Dr. A. Schiela

95440 BAYREUTH
TEL: (0921) 55-3270
TELEFAX: (0921) 55-5361

BAYREUTH, DEN 25. NOVEMBER 2019

VORTRAGSANKÜNDIGUNG

Im Rahmen unseres gemeinsamen Oberseminars

„Numerische Mathematik, Optimierung und Dynamische Systeme“

spricht

Herr Prof. Dr. Peter E. Kloeden
Universität Tübingen

am **Freitag, 06. Dezember 2019**, 10:00 Uhr s. t. über das Thema

"Forward attractors and limit sets of nonautonomous difference equations"

Abstract:

The theory of nonautonomous dynamical systems has undergone major development during the past 20 years. Two types of attractors consisting of invariant families of sets have been defined for nonautonomous difference equations, one using pullback convergence with information about the system in the past and the other using forward convergence with information about the system in the future. In both cases, the component sets are constructed using a pullback argument within a positively invariant family of sets. The forward attractor so constructed also uses information about the past, which is very restrictive and not essential for determining future behaviour.

The forward asymptotic behaviour can also be described through the omega-limit set of the system. This set is closely related to what Vishik called the uniform attractor although it need not be invariant. Provided a future uniformity condition holds, it is shown to be asymptotically positively invariant. Hence this omega-limit set provides useful information about the behaviour in current time during the approach to the future limit.

Der Vortrag findet im Gebäude NW II, S 72 statt.

gez. Lars Grüne

