

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 05. DEZEMBER 2019

## **VORTRAGSANKÜNDIGUNG**

Im Rahmen unseres gemeinsamen Oberseminars

„Numerische Mathematik, Optimierung und Dynamische Systeme“

spricht

**Herr Doc. Ing. Jiří Outrata, Dr. Sc.**  
Institute of Information Theory and Automation (UTIA)  
Academy of Sciences of the Czech Republic (ASCR)  
Prag, Tschechische Republik

am **Montag, 09. Dezember 2019**, 16 Uhr c. t. über das Thema

"On the semismooth Newton method and its application  
to a class of Nash equilibria"

Abstract:

On the basis of the concept of semismoothness a new Newton-type method is derived which is applicable to the numerical solution of generalized equations (GEs). If the right-hand side of the considered GE is strongly metrically regular around the solution, then the Newton step may easily be performed on the basis of the limiting coderivative of the considered multifunction. This method is applied to a GE which governs Nash equilibria in presence of nonsmooth terms in the objectives of the single players. This is a joint research with H. Gfrerer (Linz).

Der Vortrag findet im Gebäude NW II, S 82 statt.

gez. Lars Grüne