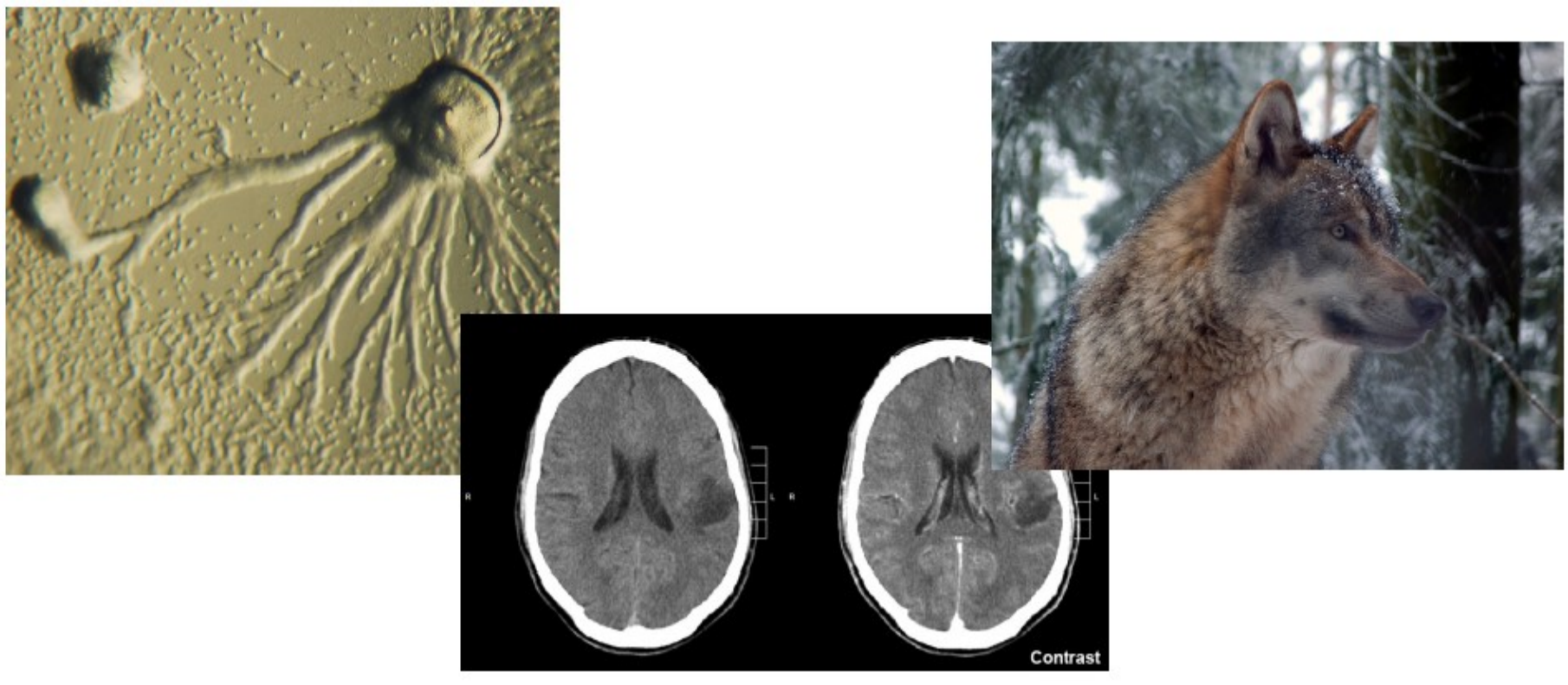
Westfälische Wilhelms-Universität Münster

Außerordentliche Vorlesungsreihe:

Transport Equations and their Applications to Chemotaxis, Glioma Growth and Wolf Movement

Prof. Dr. Thomas Hillen (University of Alberta)

In this lecture series a detailed overview about transport equations and their applications will be given. Transport equations are a powerful tool to model the movement of biological individuals (cells, mammals, bacteria), if data of individual movement paths are available. For example, con-focal microscopy allows to follow individual cancer cells moving through tissue, and GPS data allow to follow patrolling wolf in their habitats.



The lectures will comprise of some overview topics and some very detailed mathematical methods. Overviews will be given on chemotaxis, on glioma growth and wolf movement, whereas solution theories for transport equations and their scaling limits will be covered in detail.

Die Vorlesungen werden vom Institut für Numerische und Angewandte Mathematik organisiert, finden im Zeitraum vom 25.10.2011 bis zum 16.11.2011 statt, und dauern jeweils 60 Minuten. Termine und weitere Informationen zur Veranstaltung finden Sie auf:

http://wwwmath.uni-muenster.de/num/aktuelles/