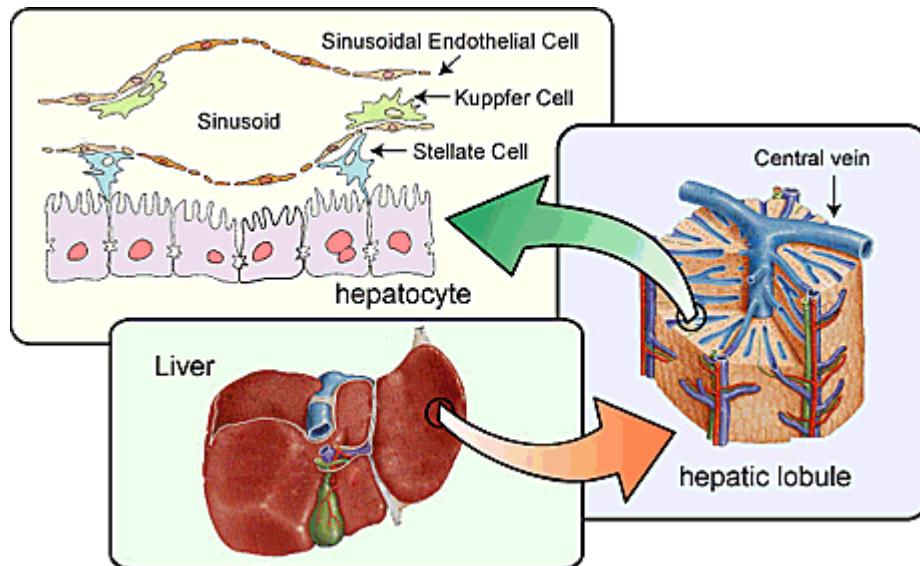


INVITATION TO THE SEMINAR IN MATHEMATICAL BIOLOGY  
(WS 2010/11)

**Mathematics of the Liver**



**OBJECTIVE**

The liver is a complicated bio-chemical factory which is essential for the metabolism of an organism. To understand its inner structure and functioning, biological processes must be studied as a whole: from the role of single molecules within the cells to the interaction of cells and, eventually, the structure of the whole organ. To this end, sophisticated methods from molecular biology have to be combined with knowledge and technology from mathematics, information sciences, chemistry and physics.

In the seminar, we are focusing on mathematical models and analysis techniques that help to understand selected aspects of liver processes at various scales as well as the interplay between events at different scales. By means of talks, discussions and computer simulations, attendees will be introduced to a highly interdisciplinary application field.

The seminar is intended for graduates (at least Vordiplom) in mathematics, physics, biology or computer science.

**TIME AND LOCATION**

Four **Monday** afternoons **14.00-17.00**

**Nov 15, Nov 29, 2010, and Jan 17, Jan 31, 2011**

Location: **INF-1096**, Computer Science Dept. of TU Dresden at Nöthnitzer Str. 46

**KICKOFF MEETING AND DISTRIBUTION OF TALKS**

**Nov 1, 2010, 14.00-15.00, INF-1096**

**ORGANIZERS**

Lutz Bruschi, Walter de Back, Andreas Deutsch, Anja Voß-Böhme  
Zentrum für Informationsdienste und Hochleistungsrechnen, TU Dresden

**SEMINAR WEBSITE**

[http://www.tu-dresden.de/zih/lehre/bio/ws1011\\_sem](http://www.tu-dresden.de/zih/lehre/bio/ws1011_sem)

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