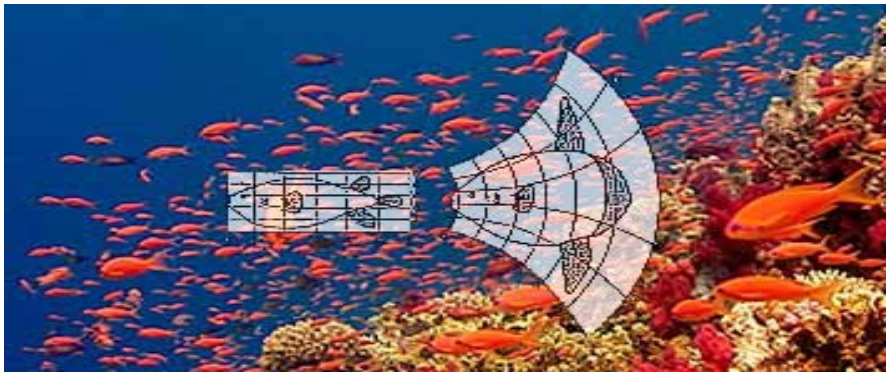
INVITATION TO NEW LECTURE (SS07)

INTRODUCTION TO MATHEMATICAL BIOLOGY I



OBJECTIVE

The life sciences are rapidly turning from qualitative to quantitative sciences. This requires the development and application of mathematical models. The goal of the lecture is an introduction into the mathematical modelling of biological problems from genetics, evolution, developmental biology and physiology. The focus of the lecture is on getting to know important mathematical model structures and methods (especially differential and partial differential equations, stochastic processes, cellular automata and complex networks). Accompanying tutorials allow the independent solution of modelling tasks.

During the one-year course (the lecture continues with part II in the winter term), key questions in biological development and corresponding mathematical models will be introduced and the biological interpretation of mathematical analysis will be demonstrated. By this, participants receive a profound introduction to modern biomathematical concepts.

This course is suitable but not restricted to undergraduates and graduates in biology, mathematics, physics, medical and computer science.

TIME AND LOCATION

Tuesday 16.45-18.15 (WIL - A 120, Zellescher Weg 12)
Start: April 17, 16.45

LECTURERS

Dr. Lutz Brusch, ZIH, TU Dresden
PD Dr. Andreas Deutsch (coordinator), ZIH, TU Dresden
Dr. Anja Voss-Böhme, Institut für Stochastik, TU Dresden

LECTURE WEBSITE

http://www.tu-dresden.de/zih/lehre/ss2007/bio/

CONTACT

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