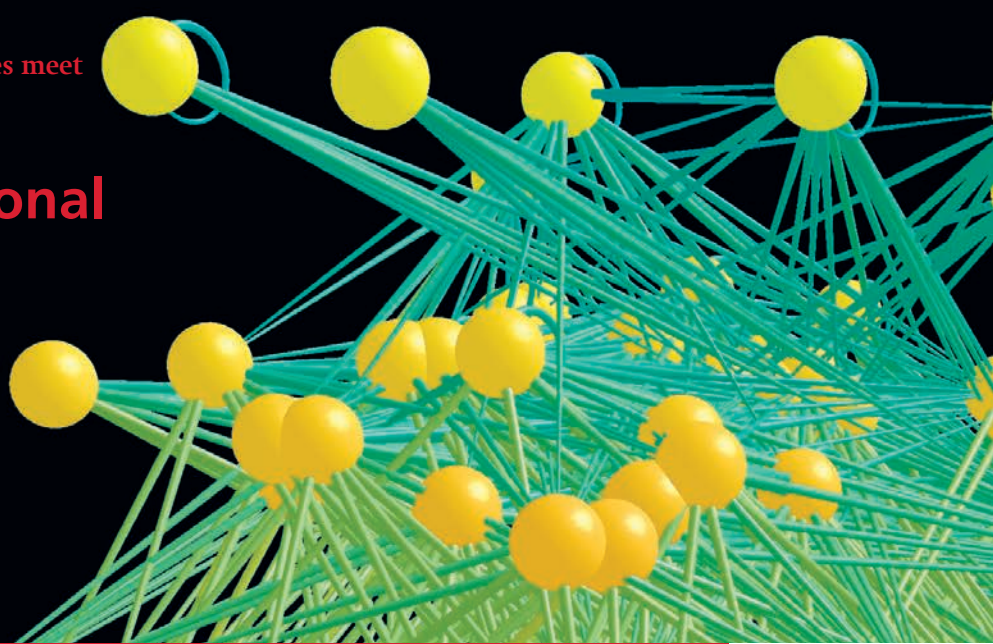


Rigi-Workshop, where disciplines meet

# Mathematical and Computational Modeling in Life Sciences



January 18 – 20, 2015, Rigi-Kulm

- Engage in the promising research area at the interface between biology and mathematics
- Discuss cutting-edge results from neighbouring disciplines
- Meet people that can boost your own research
- Present your own research

Invited speakers:

Dagmar Iber, Department of Biosystems Science and Engineering, ETH Zurich  
**Pattern Formation during Development: Morphogen Gradients and Turing Pattern Patterning on Growing Domains**

Christian Mazza, Department of Mathematics, University of Fribourg  
**Basic notions of time-continuous Markov chains with illustrations from systems biology (signalling and metabolic pathways, chemical reaction networks...)**

Oliver Ebenhö, University of Düsseldorf  
**Differential equation-based dynamic models of photosynthesis and metabolism**  
**Constraint-based models of metabolic networks**

Louis-Félix Bersier and Rudolf Rohr, Department of Biology, University of Fribourg  
**Food Webs in an ecological environment**  
**Stability of complex ecosystems**

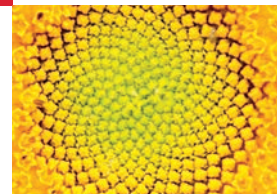
This 3-day course is held in English.

PhD students from all Swiss institutions of Higher Learning are most strongly encouraged to apply. Postdoctoral applications are also considered. Applicants are asked to submit a research title/abstract and a short letter of motivation for attending before September 30, 2014. The organizing committee will select 40 of the most outstanding applicants to participate in this workshop.

Organizer: Dr. Christian Mazza (Department of Mathematics, University of Fribourg), Jean-David Rochaix (Department of Molecular Biology, University of Geneva)

For further information and registration: <http://biologie.scnat.ch/rigi-workshop>

Presented by the Platforms Biology and Mathematics, Astronomy and Physics (MAP) of



sc | nat <sup>+</sup>

Swiss Academy of Sciences  
Akademie der Naturwissenschaften  
Accademia di scienze naturali  
Académie des sciences naturelles