



# Random Walks and Nonlinear Dynamics in the Life of Cells

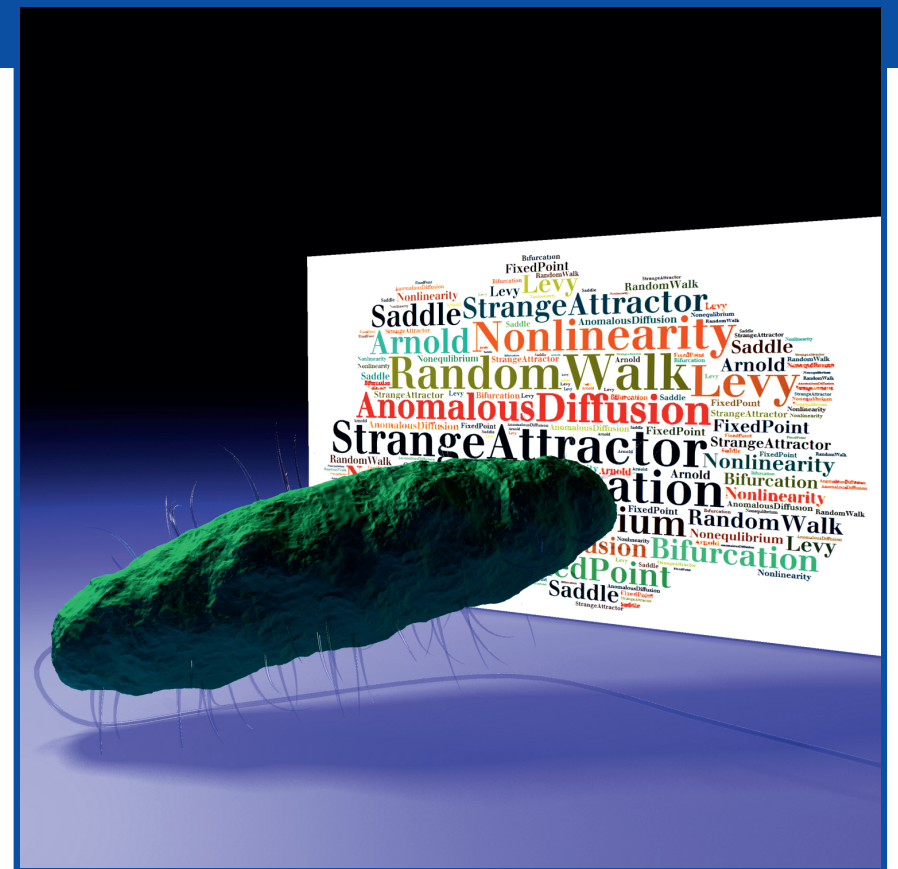
## International Workshop 18 - 22 May 2015

Living cells know nothing about anomalous diffusion, nonlinearity, and bifurcations, but they spend their entire lives taking advantage of these features. This observation is supported by a growing number of experimental cell biology studies throughout the last decade.

The goal of our workshop is to bring together leading experts in cell biology and theoretical physics in order to tie recent advances in the experimental biophysics and state-of-the-art concepts of modern nonlinear dynamics and random-walk theory.

### Topics include

- cell biophysics
- intracellular dynamics
- cellular motility
- anomalous diffusion
- nonlinear dynamics



### Invited speakers

I. Aronson (US)  
E. Barkai (IL)  
C. Beta (DE)  
E. C. Cox (US)  
E. Frey (DE)  
P. Friedl (NL)  
R. Goldstein (UK)  
S. Grill (DE)  
P. Hänggi (DE)  
T. Hyman (DE)  
P. Iglesias (US)  
M. Ivanchenko (RU)  
P. Janmey (US)  
F. Jülicher (DE)  
G. Koenderink (NL)  
J. Kondev (US)  
K. Kruse (DE)  
D.A. Lauffenburger (US)  
D. Lubensky (US)  
B. Maier (DE)  
R. Metzler (DE)

L. Oddershede (DK)  
D. Robert (UK)  
S. Safran (IL)  
E. Sahai (UK)  
E.M. Schoetz-Collins (US)  
T. Shimitzu (NL)  
I. Tolic (HR)  
G.C.L. Wong (US)

### Scientific coordinators

Sergey Denisov,  
Augsburg, Germany  
  
Lisa Manning,  
Syracuse, US  
  
Vasily Zaburdaev,  
Dresden, Germany

### Organisation

Mandy Lochar  
MPIPKS

Applications received before 31 January 2015 are considered preferentially.

Applications are welcome and should be made by using the application form on the conference web page (please see URL below). The number of attendees is limited. The registration fee for the international workshop is 120 Euro and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute. Limited funding is available to partially cover travel expenses. Please note that childcare is available upon request.

### For further information please contact:

Visitors Program – Mandy Lochar  
MPI for the Physics of Complex Systems  
Nöthnitzer Str. 38, D-01187 Dresden  
Tel: +49-351-871-1933  
Fax: +49-351-871-2199  
sincel15@pks.mpg.de  
www.pks.mpg.de/~sincel15/