

3rd Wolfgang Pauli International Workshop on:

Mathematical Modelling of Actin-Based Motility

Vienna, Austria November 6-8 2006

$$U(t)[z(t, \cdot)] = \int_0^L \left[\frac{\kappa^B}{2} |z''|^2 + \eta(t, s) \int_s^L \left(\frac{\kappa^S}{2} S(t, s, c)^2 + \frac{\kappa^T}{2} T(t, s, c)^2 \right) \rho(t, s, c) dc \right] \eta(t, s) ds + \frac{\kappa^M}{2} \left(2\pi (|z(t, L)| - R_0)_+ \right)^2$$

Speakers will include:

- Kurt Anderson** (Beatson Institute, Glasgow)
- Marie-France Carlier** (CNRS Gif-sur-Yvette)
- Anders Carlsson** (Washington University)
- Gaudenz Danuser** (Scripps Institute, La Jolla)
- Richard Dickinson** (University of Florida)
- Graham Dunn** (King's College London)
- Nir Gov** (Weizmann Institute)
- Stan Maree** (Utrecht University)
- Hans Othmer** (University of Minnesota)
- Ben Ovrin** (Albert Einstein College, New York)
- Julie Plastino** (Institut Curie Paris)
- Tatyana Svitkina** (University of Pennsylvania)
- Klemens Rottner** (GBF Braunschweig)
- Alexander Verkhovsky** (EPF Lausanne)
- Raphael Voituriez** (Université Paris VI)
- Muhammad Zaman** (University of Texas)

$$A := \{z \in H^2((0, L), \mathbb{R}^2) : |z'| = 1\}$$

$$S(t, s, c) := |(I - D(-\gamma(t, s, c))) z(t, s)|$$

$$T(t, s, c) := \arccos(z'(t, s) \cdot D(-\gamma(t, s, c)) z'(t, s)) - \alpha \in [-\pi, \pi]$$

$$\rho \partial_t^2 x = -\kappa \partial_\sigma^4 x + \lambda \partial_\sigma [(|\partial_\sigma x|^2 - 1) \partial_\sigma x] - \beta_T \partial_t x, \quad \sigma \in (v_0 t - L, v_0 t)$$

$$M (\partial_t + v_0 \partial_\sigma)^2 x = -\beta_H (\partial_t + v_0 \partial_\sigma) x + \kappa \partial_\sigma^3 x - \lambda (|\partial_\sigma x|^2 - 1) \partial_\sigma x, \quad \sigma = v_0 t$$

Location: Institute of Molecular Biotechnology IMBA, Dr. Bohrgasse, 3, 1030 Vienna

See meeting website http://www.wpi.ac.at/theme_view.php?id_theme=13

Registration deadline: The deadline for registration and submission of abstracts for poster presentations is **September 30 2006**.

Single page abstracts, with name and affiliation should be sent to: yasmin.dolak-struss@univie.ac.at

Organizers: Yasmin Dolak-Struß, Christian Schmeiser (University of Vienna and Wolfgang Pauli Institute) and Vic Small (IMBA)



WK Differential Equations