Curriculum Vitae Timon Idema

Personal data
Full name: Tymen Idema
'Short' first name: Timon
Date of birth: April 20, 1981
Place of birth: Winterswijk (The Netherlands)
Nationality: Dutch

Contact data
Instituut-Lorentz for Theoretical Physics
Niels Bohrweg 2, 2333 CA Leiden
Telephone: +31-71-5275519
Email: idema@lorentz.leidenuniv.nl
Website: www.lorentz.leidenuniv.nl/∼idema

Education

- 1999-2004 Physics, Leiden University
  (graduated with honors (cum laude) August 31, 2004).
- 1999-2005 Mathematics, Leiden University
  (graduated with honors (cum laude) June 29, 2005).
- 1993-1999 High school (VWO), Christelijk College Schaersvoorde, Aalten.

Work

- 2005-present PhD student theoretical physics, Instituut-Lorentz, Leiden University.
- 2006-2008 Teaching assistant physics, courses Classical Mechanics and Statistical Physics, Leiden University.
- 2001-2007 Teacher exam training Leiden University.
- 2001-2005 Student-assistant mathematics, Leiden University.

Other activities

- January-February 2008 Two-month visit to Institut Curie, Paris, France.
- 2007-2008 Member and vice-president of the Central Works Council (COR) of FOM (the Dutch National Science Foundation's division for Fundamental Research on Matter).
- 2001-2002 Ab-actis mathematics society 'De Flesch van Klein'.
- 1997-1999 Member school council C.C. Schaersvoorde.
- 1995-1999 Member student council C.C. Schaersvoorde (1997-1999 president).

Awards

- 2008 Research elected 'discovery of the year' of the Leiden physics department.
- 2000 Prize of the 'Stichting Physica' for excellent results in physics.

Publications

- S. Semrau, T. Idema, L. Holtzer, T. Schmidt and C. Storm, "Accurate determination of elastic parameters for multi-component membranes", Phys. Rev. Lett. **100**, 088101 (2008).
- P.M. Shaklee, T. Idema, G. Koster, C. Storm, T. Schmidt and M. Dogterom, "Bidirectional membrane tube dynamics driven by nonprocessive motors", Proc. Natl. Acad. Sci. USA **105**, 7993-7997 (2008).
- S. Semrau, T.Idema, T. Schmidt and C. Storm, "Membranes mediated interactions measured using membrane domains", accepted for publication in Biophysical Journal (2009).
- T. Idema, S. Semrau, C. Storm and T. Schmidt, "Membrane mediated sorting", submitted (2009).
- T. Idema, J.M.J. van Leeuwen and C. Storm, "Gibbs free energy and phase diagrams of ternary lipid systems", submitted (2009).

Talks

- The magic of membranes - where differential geometry and biology meet
  - Cambridge DAMTP seminar (Cambridge, UK, May 2009)
- The math of membranes - how differential geometry can be useful for biology
  - UCLA physics/chemistry theory seminar (Los Angeles, California, January 2009)
  - UPenn physics seminar (Philadelphia, Pennsylvania, January 2009)
- Membrane mediated sorting
  - FOM program meeting (Vrije Universiteit Amsterdam, November 2008).
  - FOM Biophysics days (Veldhoven, September 2008).
- Life by means of random processes - A story of diffusion, regulation, cooperation and the usefulness of inefficiency
  - Mathematics Seminar Leiden (October 2008).
- Ncd pulls along - how nonprocessive motors can contribute by being inefficient
  - Casimir spring school (Heeg, May 2008).
- The math of membranes - how differential geometry can be useful for biology
  - This weeks discoveries (Leiden, Faculty of Science Seminar, April 2008).
  - Theory Seminar Institut Curie (Paris, France, January 2008).
  - Mathematics Seminar Leiden (March 2007).
- How molecular motors pull membrane tubes
  - DRSTP spring school (Driebergen, April 2007).
- Towards understanding the shape of multi-component bilayer vesicles
  - Fom@Veldhoven (Veldhoven, January 2007).
  - Universitas Jagellonica (Cracow, Poland, June 2006).
  - DRSTP spring school (Driebergen, May 2006).
  - Casimir spring school (Heeg, May 2006).
- Subcritical transitions in the parallel-plate flow of viscoelastic fluids
  - EU phynecs network meeting, Cargese (Corsica, France, September 2004).

Posters

- The math of membranes - how differential geometry can be useful for biology
  - Collective effects in cell biophysics (Les Houches, France, April 2008).
- Modeling cell membrane heterogeneity with giant vesicles
  - Casimir Science Days (Eindhoven, May 2007).
  - 51st meeting of the Biophysical Society (Baltimore, Maryland, USA, March 2007).