
Curriculum Vitae

Ilan Tsafirir

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I am seeking a Postdoctoral position in which to apply my extensive statistical physics intuition to both experimental and theoretical systems.

Education

- 2002-present Weizmann Institute, Rehovot, Feinberg Graduate School
Post doctoral fellow under the supervision of Prof. Eytan Domany
Developing novel methods for the analysis and visualization of large-scale multidimensional data.
- 1996-2002 Ph.D Experimental and Theoretical Physics, Weizmann Institute, Israel.
Shape Instabilities of Membranes under Geometric Constraints.
Supervisor: Prof. Joel Stavans
- 1993 - 1996 B.Sc with Honors in Physics and Mathematics, Tel-Aviv University, Israel.

Employment

- 2002-present Post doctoral research fellow Weizmann Institute.
- 1996-2002 Research Assistant and Tutor, Weizmann Institute.
- 1990 - 1993 Military Service. Military Intelligence, Israeli Air Force

Skills

- Strong background in mathematics.
- Extensive experimental experience.
- Expertise with computer programming and simulations.
- Project leadership and management.
- Broad knowledge of statistical mechanics.

Grants and Awards

1. Weizmann Fellowship (2000-2002)
2. Dean award, Faculty of Exact Sciences, Tel-Aviv University (1996)

Personal

15 years of training, and 6 years of teaching experience in Bujinkan Budo Taijitsu. Martial-arts instructors diploma from Wingate Institute for Physical Education and Sport, 1998.

List of publications

Papers in refereed journals

1. V. Frette, M.A. Guedeau-Boudeville, I.Tsafirir, L. Jullien, D. Kandel, and J. Stavans., Coiling of cylindrical membrane stacks with anchored polymers, Phys, Rev. Lett, **83**, 2465-2468, 1999.
2. I.Tsafirir, M.A. Guedeau-Boudeville, D.Kandel, and J.Stavans, Coiling instability of multilamellar membrane tubes with anchored polymers, Phys, Rev. E, **663**,031603, 2001.
3. I. Tsafirir, D. Sagi, T. Arzi, M.A. Guedeau-Boudeville, V. Frette, D. Kandel, and J. Stavans, Pearling instabilities of membrane tubes with anchored polymers, Phys, Rev. Lett, **86**,1138-1141, 2001.
4. I. Tsafirir, Y. Caspi, T. Arzi, M.A. Guedeau-Boudeville, and J. Stavans, Budding and Tubulation in Highly Oblate Vesicles by Anchored Polymers, Phys, Rev. Lett, **91**, 138102 (2003)

Papers in preparation:

5. I. Tsafirir, D. Tsafirir, L. Ein-Dor, O. Zuk and E. Domany, Iterative sorting algorithm for multi-dimentional data organization and visualization.

Conference proceedings:

6. Ilan Tsafirir, Tamar Arzi, Dror Sagi, Marie-Alice Guedeau-Boudeville, Ludovic Jullien, Daniel Kandel, and Joel Stavans, Instabilities of Membranes with Anchored Polymers, ICPB 2001.
7. D. Tsafirir, W. Liu, Y. Yamaguchi, I. Tsafirir, Y. Wen, W. Gerald, R. Stengel, F. Barany, P. Paty, E. Domany, and D. Notterman, A novel mathematical approach to analyzing gene expression data: results from an international colon cancer consortium, accepted for proc. of AACR 2004.
8. C. Rost, I. Tsafirir, N. Stransky, D. Tsafirir, J-P. Thiery, F. Radvanyi, E. Domany, and X. Sastre, Characterization of gene expression profiles in cervical carcinoma, accepted for proc. of AACR 2004.
9. I. Tsafirir, D. Tsafirir, L. Ein-Dor, O. Zuk and E. Domany, Sorting Points Into Neighborhoods (SPIN), Submitted to ISMB 2004.
10. I. Tsafirir, D. Tsafirir, L. Ein-Dor, O. Zuk and E. Domany, Sorting Points Into Neighborhoods (SPIN): a novel data organization and visualization tool, Submitted to RECOMB 2004.

Invited Presentations

Clustering and CTWC, Neurogenomics Workshop, Biozentrum Basel, Switzerland, December 2003

Referents

Prof. Joel Stavans

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