Dr. Harry Fried

Detroit Country Day School
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CURRENT POSITION

(1993-present) ***Science Teacher***, **Detroit Country Day School**, Upper School

Teaching Assignments: *(1993-present)* physics, *(2001-present)* geology, oceanography

Faculty Sponsor: *(1993-present)* Science Olympiad Team, *(2005-present)* Philosophy Club

Coaching Assignments: *(2004-present)* Head Coach Ultimate Frisbee Team,
(2001-present) Head Coach JV Track Team, *(1993-1997)* Assnt. Coach Men's JV Tennis Team

EDUCATION

(1991-3) Secondary Education Teachers Certification Program, University of Michigan, Ann Arbor

- ► ***Michigan Professional Teaching Certificate***
  Endorsements: physics (major), math, chemistry, general science
- ► Recipient of the ***Lawrence A. Conrey Award*** for excellence in Science Education

(1989) ***Ph.D.*** *&* *(1986)* ***M.Sc.*** Theoretical and Mathematical Physics
University of Washington, Seattle (*Advisor*: Prof. Michael Schick)

(July 1985) Summer School for Chaos and Fluid Dynamical Instabilities
Center for Non-Linear Studies, University of California, San Diego

(1984) ***Bachelor of General Studies***, University of Michigan, Ann Arbor

EDUCATIONAL WRITINGS

Written three course-books that accompany courses I have taught at DCDS:

Hands - On Physics *Volumes I & II (© 1998 Harry Fried)*

Hands - On Geology *(© 2003 Harry Fried)*

Hands - On Oceanography *(© 2003 Harry Fried)*

RESEARCH EXPERIENCE

(1989–91) ***Post-Doctoral Fellow*** of the Max Planck Institute for Polymer Research &
Research Fellow in the group of Prof. Kurt Binder, Institute of Physics,
Johannes Gutenberg University, Mainz, Germany

(1986-89) ***Doctoral Research Assistant*** in the group of Prof. Michael Schick, Department of Physics,
University of Washington, Seattle

Dissertation: *"A Site Diluted Three State Potts Model on a Triangular Lattice: A Monte Carlo Study"*

(1984-86) ***Research Assistant*** in the group of Prof. Bernard Hallet, **Glacier Bed Topography Study**,
Quaternary Research Center, University of Washington, Seattle

(June–Sept. 1986) ***Field Research Assistant*** in the group of Prof. Charles Raymond and Prof.
William Harrison, **Glacier Comparison Project**, Delta Mountains, Alaska

REFERENCES

Available upon request

PUBLICATION LIST

1. *Nonlocal Percolation in an Antiferromagnetic Potts Model*, H. Fried and M. Schick, Phys. Rev. B **38**, 954-956 (1988)

Ph.D. Thesis:

A Monte Carlo Study of a Site Diluted Three State Potts Model on a Triangular Lattice, June 1988 (Univ. of Washington, Seattle), Advisor: Prof. M. Schick

2. *A Hierarchical Percolation Model: Some Exact Results on the Sierpinski Gasket*, H. Fried, J. Phys. A **22**, 4477-4486 (1989)

3. *New Percolation Structures in Antiferromagnetic Potts Models*, H. Fried and M. Schick, Phys. Rev. B **41**, 4389-4402 (1990)

4. *The Checkerboard Update Glauber Model, Cellular Automata and Ising Models*, H. Fried, J. Phys. A **23**, 4165-4181 (1990)

5. *The Microphase Separation Transition in Symmetric Diblock Copolymer Melts: A Monte Carlo Study*, H. Fried and K. Binder, Chem. Phys. **94**, 8349-8366 (1991)

6. *Non-Gaussian Conformational Behavior in Diblock Copolymer Melts: Is the RPA Valid?,* H. Fried and K. Binder, Europhys. Lett. **16**, 237-242 (1991)

7. *Non-Local Percolation and Partial Ordering in the Dilute Baxter-Wu Model*, H. Fried, J. Phys. A **25**, 2545-2555 (1992)

8. *The Microphase Separation Transition in Asymmetric Diblock Copolymer Melts: A Monte Carlo Study*, K. Binder and H. Fried, Macromolecules **26** (1993) 6878-6883

9. *Monte Carlo Studies of Phase Transitions in Polymer Melts and Block Copolymer Melts*, K. Binder, H.P. Deutsch, M. Muller, H. Fried and M. Kikuchi, (Submitted to the proceedings of the First International Conference on Scaling Properties in Complex Fluids, Trieste, 1994)

CONFERENCES AND MEETINGS

1. *Hands On Physics: A New Approach to Reading Physics for Active Students* (Presented at the Michigan Section of the American Association of Physics Teachers, Fall 1996)

2. *The Energy Approach to Introductory Physics* (Presented at the Michigan Section of the American Association of Physics Teachers, Fall 1998)

3. *Text In Context* (Presented at the Michigan Section of the American Association of Physics Teachers, Fall 2000)