THEORETICAL ASTROPHYSICS • CALTECH • MC 130-33 • PASADENA, CA 91106

CURRICULUM VITAE

ORLY GNAT

PERSONAL

- **Name**: Orly Gnat
- **Current Address**: Theoretical Astrophysics,
  California Institute of Technology, MC 130-33,
  Pasadena, CA 91125
- **Phone numbers**: Office: +1 (626) 395 8307
  Fax: +1 (626) 796 5675
  Home: +1 (626) 396 1174
- **E-mail**: orlyg@tapir.caltech.edu

- **Born**: September 5, 1976, Israel
- **Family status**: Married + 1

EDUCATION

- **2005 – 2008**: Visiting Graduate Student, California Institute of Technology
- **2002 – 2008**: Ph.D.,School of Physics and Astronomy, Tel-Aviv University, Israel

  Subject: Non-Equilibrium Metal-Ionization in Cosmological Environments: Conduction Fronts, Radiatively Cooling Gas, and Fast Shocks.

  Advisor: Prof. Amiel Sternberg
- **1994 – 1997**: B.Sc., Magna Cum Laude,
  in Physics and Computer Science,
  Tel Aviv University, Israel

POSITIONS & EMPLOYMENT

- **2008 – present**: Chandra Postdoctoral Fellow, Theoretical Astrophysics, Caltech
- **2002 – 2005**: Tel Aviv University, School of Physics and Astronomy, Teaching Assistant
- **1997 – 2002**: Military Service (Operations Research Officer. Rank: Captain)

HONORS AND AWARDS

- **2008**: Chandra Fellow
- **2006**: The John Bahcall Astrophysics Prize for Excellence in Research (at Tel-Aviv University)
- **2006**: Rector's Award for Excellence in Teaching
- **2006**: School of Physics and Astronomy Award for Excellence in Teaching
- **2005**: The Ilan Ramon Scholarship for Outstanding Academic Achievements (A National Israeli Scholarship)

- **2005**: School of Physics and Astronomy Award for Excellence in Teaching
- **2005**: Dean's Commendation for Public Outreach Activity
- **1997**: The Dean's Honor List
- **1996**: The Dean's Honor List

PARTICIPATION IN SCIENTIFIC MEETINGS

- **2008**: 'Theoretical Astrophysics in Southern California 2008' – Irvine, CA (Contribution: Talk).
- **2008**: 'Galaxy Evolution' Workshop – Jerusalem, Israel (Contribution: Talk).
- **2008**: 4th Irvine Center for Cosmology Workshop: 'Galaxy Formation and Evolution as Revealed by Cosmic Gas' – Irvine, CA (Contribution: Talk).
- **2007**: AAS 210th meeting – Honolulu, Hawaii (Contribution: Talk).
- **2006**: 'Theoretical Astrophysics in Southern California 2006' – UC Santa Barbara, CA, (Contribution: Talk).
- **2006**: 'Active Galactic Nuclei: From Atoms to Black Holes' – Tel Aviv, Israel.
- **2004**: 'Extra-Planar Gas' – Dwingeloo, The Netherlands (Contribution: Talk).
- **2004**: 'The Origin of Galaxies' winter school – Jerusalem, Israel.
- **2003**: 'Galaxy Formation' Workshop – Jerusalem, Israel (Contribution: Talk).

SEMINARS AND COLLOQUIA:

- **2008:** *Non -Equilibrium Ionization in Metal Ion Absorber*s *and in Post-Shock Cooling Layers*, UC Berkeley, August 2008.
- **2008:** *Non -Equilibrium Ionization in Metal Ion Absorber*s *and in Post-Shock Cooling Layers*, Hebrew University of Jerusalem, May 2008.
- **2007:** *Non -Equilibrium Ionization in Metal Ion Absorber*s, Weizmann Institute of Science, October 2007.
- **2007:** *Non -Equilibrium Ionization in Metal Ion Absorber*s, California Institute of Technology, September 2007.
- **2007:** *Non -Equilibrium Ionization in Metal Ion Absorber*s, Institute for Theory and Computation - Harvard-Smithsonian Center for Astrophysics, May 2007.
- **2007:** *Non-Equilibrium Ionization in Metal Ion Absorbers*, Space Telescope Science Institute, May 2007.
- **2007:** *From High-Velocity Clouds to the Warm-Hot Intergalactic Medium: Non-Equilibrium Ionization in Metal Ion Absorbers*, Tel-Aviv University, January 2007.
- **2006**: *From High-Velocity Clouds to the Warm-Hot Intergalactic Medium: Equilibrium and Non-Equilibrium Ionization in Metal Ion Absorbers*, Institute for advanced Study, Princeton, May 2006.
- **2004**: *Ionization of Metals in Low-Mass Minihalos*, Tel-Aviv University, November 2004.
- **2004**: *Ionization of Metals in Low-Mass Minihalos*, UC Berkeley, September 2004.

LIST OF PUBLICATIONS

REFEREED JOURNALS

5. Gnat, O. & Sternberg, A., (2008), *Metal Absorption Column Densities in Fast Radiative Shocks,* ApJ in press, astro-ph/0811-1774.

4. Chelouche, D., Ménard, B., Bowen, D. V., **Gnat, O.** (2008), *On the Connection Between Metal Absorbers and Quasar Nebulae,* ApJ 683, 55.

3. Gnat, O. & Sternberg, A., (2006), *Time-Dependent Ionization in Radiatively Cooling Gas*, ApJS, 168, 213.

2. Gnat, O. & Sternberg, A., (2004), *Photoionized Gas in Dark Matter Minihalos in the Galactic Halo and Local Group*, ApJ, 608, 229.

1. Mazeh, T., Latham, D. W., Goldberg, E., Torres, G., Stefanik, R. P., Henry, T. J., Zucker, S., **Gnat, O.**, Ofek, E. O. (2001), *Studies of multiple stellar systems - IV. The triple-lined spectroscopic system Gliese 644*, MNRAS, 325, 343

CONFERENCE PROCEEDING

2. Gnat, O. & Sternberg, A., (2007), *Time-Dependent Radiative Cooling*, in AAS Meeting Abstracts, 210, 113.08.

1. Gnat, O. & Sternberg, A., (2004), *Photoionized Gas in Dark Matter Minihalos in the Galactic Halo and Local Group*, in APS Conf. Ser. 331: Extra-Planar Gas, 331, 97, Ed. Robert Braun.