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Present Position

- Postdoctoral Fellow, University of Massachusetts Amherst, *2001 - present*

Education

- Ph.D., Physics, University of California at Santa Cruz. *Summer 1999*
- M.S., Physics, University of California at Santa Cruz, *Fall 1996*
- B.S., Physics and Astronomy, University of California at Berkeley, *Fall 1993*

Research Experience

Postdoctoral Fellow, University of Massachusetts Amherst, *2001 - present*

Postdoctoral Fellow, Hebrew University Jerusalem, *1999 - 2001*

Graduate Fellow, University of California, Santa Cruz, *1998-1999*

Teaching Experience

Teaching Assistant at University of California, Santa Cruz (*15 quarters*)

Courses included: Classical Mechanics, Physics of Music, Conceptual Physics, Introductory Astronomy, and Introductory Physics *1994 - 1998*

Teaching Assistant at University of California, Berkeley (*2 semesters*)

Introductory Physics Lab *1993 - 1994*

Service Experience

Journal Referee — *Astrophysical Journal*, *Monthly Notices of the Royal Astronomical Society*, *Astronomy & Astrophysics*, *Publications of the Astronomical Society of Australia*, *2000 - 2004*

Physics Representative to the Graduate Student Association, *1997 - 1999*

Grants

Title: Lyman Limit Systems: Probing the Protgalactic/IGM Interface

NSF AST-0307408

Jason Prochaska (PI), Scott Burles, Rebecca Bernstein, Stephen Shectman and Ariyeh Maller
2003 - 2006

Workshops and Conferences

1. Kavli Institute for Theoretical Physics workshop on Galaxy - Intergalactic Medium Interactions, Santa Barbara, Oct. 2004
2. Workshop on Multiwavelength Mapping of Galaxy Formation and Evolution, Venice, Oct. 2003
3. Jerusalem Workshop on Galaxy Formation, Jerusalem, June 2003
4. Carnegie Observatories Centennial Symposium II: Measuring and Modeling the Universe, Pasadena, Nov. 2002
5. Where's the Matter? Tracing Dark and Bright Matter with the New Generation of Large-Scale Surveys, Marseille, June 2001
6. Gaseous Matter in Galaxies and Intergalactic Space, Paris, June 2001
7. Disk Galaxies and Galactic Disks, Rome, June 2000
8. Galaxy Formation and Evolution, Santa Barbara, March 2000
9. Gravitational Lensing: Recent Progress and Future Goals, Boston, July 1999
10. Rencontres Internationales de l'IGRAP: Clustering at High Redshift, Marseille, July 1999
11. The Hy-Redshift Universe: Galaxy Formation and Evolution at High Redshift, Berkeley, June 1999
12. After the Dark Ages: When Galaxies Were Young (the Universe at $2 \leq z \leq 5$), College Park, Oct. 1998
13. Galaxies at Different Redshifts, Las Cruces, April 1998
14. Galaxy Formation: The 15th Jerusalem Winter School in Theoretical Physics, Jerusalem, Jan. 1998
15. Current Topics in Astrofundamental Physics: 6th course, Erice, Sept. 1997
16. Galaxy Halo Workshop, Santa Cruz, Aug. 1997
17. Jodrell Bank Workshop on Golden Lenses, Jodrell Bank, June 1997
18. 18th Texas Symposium on Relativistic Astrophysics, Chicago, Dec. 1996

Invited Talks

M.I.T., Nov. 2004
Carnegie Observatories, Oct. 2004
Yale, Sept 2004
Penn State, Sept. 2004
New York University, June 2004
Univeristy of California Santa Cruz, Nov. 2003
Univeristy of California Berkeley, Nov. 2003
University of Chicago, Nov. 2003
Institut Astrophysique de Paris, Oct. 2003
Space Telescope Science Center, Oct. 2003
Oxford Univeristy, June 2003
University of Arizona, Dec. 2002
University of California San Diego, Nov. 2002
Observatorio Astronomico di Trieste, May 2002
Hebrew University of Jerusalem, May 2002
University of Massachusetts Amherst, Sept. 2000
Ohio State University, Sept. 2000
Tel Aviv University, Feb. 2000
Technion, May 2000
California Institute of Technology, Feb. 1999
CITA, Jan. 1999

Publications

Refereed Journals (171 citations)

Numbers in parentheses refer to the number of citations

The Galaxy Angular Correlation Functions and Power Spectrum from the Two Micron All Sky Survey

A. H. Maller, D. H. McIntosh, N. Katz and M. D. Weinberg
ApJ, in press, January 2005 (10)

Multi-Phase Galaxy Formation: High Velocity Clouds and the Missing Baryon Problem

A. H. Maller, and J. S. Bullock
MNRAS, in press, December 2004 (2)

The Clustering Dipole of the Local Universe from the Two Micron All Sky Survey

A. H. Maller, D. H. McIntosh, N. Katz and M. D. Weinberg
ApJL, 598, L1, November 2003 (3)

Damped Lyman Alpha Systems and Galaxy Formation Models - II. High Ionization State Gas and Lyman limit systems

A. H. Maller, J. X. Prochaska, R. S. Somerville and J. R. Primack
MNRAS, 343, 268, July 2003 (7)

Towards a Resolution of the Galactic Spin Crisis: Mergers, Feedback, and Spin Segregation

A. H. Maller and A. Dekel
MNRAS, 335, 487, September 2002 (25)

Lensing by Lyman Limit Systems: Determining the Mass to Gas Ratio

A. H. Maller, T. Kolatt, M. Bartelmann and G. R. Blumenthal
ApJ, 569, 72 April 2002 (2)

Modeling Angular-Momentum History in Dark-Matter Halos

A. H. Maller, A. Dekel and R. S. Somerville
MNRAS, 329, 423 February 2002 (31)

Damped Lyman Alpha Systems and Galaxy Formation Models - I. The Radial Distribution of Cold Gas at High z

A. H. Maller, J. X. Prochaska, R. S. Somerville and J. R. Primack
MNRAS, 326, 1475 October 2001 (14)

Arc Statistics in Clusters: Galaxy Contribution

R. A. Flores, A. H. Maller, and J. R. Primack
ApJ, 535, 555 June 2000 (12)

Breaking the Disk/Halo Degeneracy with Gravitational Lensing

A. H. Maller, L. Simard, P. Guhathakurta, J. Hjorth, A. O. Jaunsen, R. A. Flores, and J. R. Primack ApJ, 533, 194 April 2000 (20)

Statistical Lensing by Galactic Disks

A. W. Blain, O. Möller, and A. H. Maller
MNRAS, 303, 423 February 1999 (21)

Inclination Effects in Spiral Galaxy Gravitational Lensing

A. H. Maller, R. A. Flores, and J.R. Primack
ApJ, 486, 681 September 1997 (24)

Conference Proceedings

Large Scale Structure from the Two Micron All Sky Survey

A. H. Maller, D. H. McIntosh, N. Katz and M. D. Weinberg, 2003

ESO Workshop on Multiwavelength Mapping of Galaxy Formation and Evolution

Resolving the Spin Crisis: Mergers and Feedback

A. Dekel and A. H. Maller, 2002

The Mass of Galaxies at Low and High Redshift

Structure of Bright 2MASS Galaxies: 2D Fits to the Ks-band Surface Brightness Profiles

D. H. McIntosh, A. H. Maller, N. Katz, and M. D. Weinberg, 2002

Galaxy Evolution, Theory and Observations

The Evolution with Redshift of Damped Lyman Alpha Systems using Semi-Analytic Models

A. H. Maller, J. X. Prochaska, R. S. Somerville and J. R. Primack, 2000

Galaxy Disks and Disk Galaxies

The Disk/Halo Degeneracy and Spiral Lensing

A. H. Maller, L. Simard, P. Guhathakurta, J. Hjorth, A. O. Jaunsen,

R. A. Flores, and J. R. Primack, 2000

Gravitational Lensing: Recent Progress and Future Goals

Optical Counterparts to Damped Lyman Alpha Systems

A. H. Maller, J. X. Prochaska, R. S. Somerville and J. R. Primack, 1999

Proceedings of Rencontres Internationales de l'IGRAP, Clustering at High Redshift

Damped Ly-alpha Systems in Semi-Analytic Models:

Sensitivity to dynamics, disk properties, and cosmology

A. H. Maller, R. S. Somerville, J. X. Prochaska and J. R. Primack, 1999

The Hy-Redshift Universe: Galaxy Formation and Evolution at High Redshift

Making Damped-Lyman-Alpha-systems in Semi-Analytic-Models

A. H. Maller, R. Somerville, J. X. Prochaska, and J. R. Primack, 1998

After the Dark Ages: 9th Annual October Maryland Astrophysics Conference

Determining Halo and Disk Properties from Gravitational Lensing of Spiral Galaxies

A. H. Maller, R. A. Flores, and J.R. Primack, 1997

Galactic Halos: A UC Santa Cruz Workshop

Modeling Spiral Galaxy Lenses

A. H. Maller, R. A. Flores, and J.R. Primack, 1997

Golden Lenses: Proceedings of a workshop held at Jodrell Bank

Works In Progress

Testing the Merger Origin of Hubble Type in Cosmological SPH Simulations

A. H. Maller, N. Katz, D. Keres, R. Davé, and D. H. Weinberg, 2005, in preparation

Angular Momentum in SPH simulations

D. Keres, A. H. Maller, N. Katz, R. Davé, and D. H. Weinberg, 2005, in preparation

Damped Lyman Alpha Systems and Galaxy Formation Models III:

Optical Counterparts of Damped Systems

A. H. Maller, R. H. Wechsler, R. S. Somerville, J. R. Primack and J. X. Prochaska, 2005, in preparation

Primary References

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Additional References

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