Juan F. Lara

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Date of Birth: 08/16/69
Citizenship: U.S.

Education

1992-2000	Ph.D. in Physics (received 12/00) University of Texas at Austin Supervisor: Prof. R.A. Matzner, Physics
1991-1992	Ph.D. Candidate in Physics Columbia University Columbia Graduate School of Arts and Sciences Supervisor: Prof. Allan S. Blaer, Physics
1987-1991	B.A. in Physics (received 5/91) Columbia University, Columbia College Counselor: Prof. Allan S. Blaer, Physics

Professional Experience

Fall, 2000 – Present	Lecturer, Freshman Physics Department of Physics University of Texas, Austin TX
Fall, 1999 – Spring, 2000	Assistant Instructor, Physical Science Department of Physics University of Texas, Austin TX
Spring 1996 – Present	Research Scientist Assistant, Center for Relativity, University of Texas, Austin, TX Research in Big Bang Nucleosynthesis Advisor: Richard A. Matzner

Spring 1994 – Spring 1995, Fall 1995	Grader, Department of Physics, University of Texas, Austin TX
Fall 1992 – Fall 1993, Summer 1995, Summer 2000	Teaching Assistant, Department of Physics, University of Texas, Austin TX

Computational Experience

Programming Experience in FORTRAN 77, FORTRAN 90, and Maple.

Awards and Honors

1998	Outstanding Presentation, American Physical Society, Texas Section Meeting
1992–1994	Fellowship, Department of Education Graduate Assistance in Areas of National Need

Member Phi Beta Kappa
Graduated Summa Cum Laude from Columbia College, 1991

Publications

Juan F. Lara, "Neutrino Heating in an Inhomogeneous Big Bang Nucleosynthesis Model". To appear in **The 20th. Texas Symposium on Relativisitic Astrophysics** Austin, Texas, 2000. Edited by J. Craig Wheeler and Hugo Martel. (American Institute of Physics, Melville, 2001), p. 349.

Juan F. Lara, "Neutron Diffusion and Nucleosynthesis in an Inhomogeneous Big Bang Model". To appear in **The Seventh Texas-Mexico Conference on Astrophysics: Flows, Blows, and Glows**, Revista Mexicana de Astronomia y Astrofisica, Serie de Conferencias. Austin, Texas, 2000. Edited by William Lee and Silvia Torres-Peimbert.

Juan F. Lara, "Comparison of Two Distinct BBN Codes". in **Stellar Evolution, Stellar Explosions and Galactic Chemical Evolution**, proceedings of the Second Oak Ridge Symposium on Atomic and Nuclear Astrophysics. Oak Ridge, Tennessee, 1997. Edited by Anthony Mezzacappa (Institute of Physics Publishing, Bristol, 1998), p. 123.

Richard A. Matzner, Mijan Huq, Alonso Botero, Dae Il Choi, Ullar Kask, Juan F. Lara, Steven Liebling, David Neilsen, Premana Premadi and Deirdre Shoemaker.
"Analysis of "Gauge Modes" in Linearized Relativity"
Class. Quantum Grav. **14** (1997) L21-L27.

Recent Talks and Seminars

"Neutron Diffusion and Nucleosynthesis in an Inhomogeneous Big Bang Model" April 2002 Meeting of the American Physical Society. Albuquerque, New Mexico. April, 2002.

"Neutrino Heating in an Inhomogeneous Big Bang Nucleosynthesis Model". The 20th. Texas Symposium on Relativisitic Astrophysics. Austin, Texas, 2000. December, 2000

"Expanding the Capabilities of a Big Bang Nucleosynthesis Code" April 2000 Meeting of the American Physical Society. LongBeach, California. April/May, 2000.

"Methods of Calculating the Neutrino Heating Effect in Big Bang Nucleosynthesis" Poster Joint Fall Meeting of the Texas Section of the APS, AAPT, and Zone 13 of the SPS. El Paso, Texas. October, 1998.

"Comparison of Two Distinct BBN Codes". Condensed Talk and Invited Poster Second Oak Ridge Symposium on Atomic and Nuclear Astrophysics. Oak Ridge, Tennessee. December, 1997.

"Comparison of Two Distinct BBN Codes". International Workshop on Synthesis of Light Nuclei in the Early Universe. Trento, Italy. June, 1997.

References

(research)
Prof. R.A. Matzner, University of Texas at Austin,
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(teaching)
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