

Megan Cathryn Novicki

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RESEARCH INTERESTS	Cosmology, stellar physics, high resolution optical spectroscopy, galactic chemical evolution, Big Bang nucleosynthesis, formation of the elements.	
EDUCATION	University of Hawai'i at Mānoa , Honolulu, Hawai'i USA Ph.D. Candidate, Astronomy, December 2001 (expected graduation date: October 2004) <ul style="list-style-type: none">• Dissertation Topic: "The Rare Light Elements in Very Low Metallicity Halo Stars"• Advisor: Ann M. Boesgaard M.S., Astronomy, December 2002 The University of Michigan , Ann Arbor, Michigan USA B.S., Astronomy and Astrophysics, May 1999 B.S., General Physics, May 1999	
HONORS AND AWARDS	The University of Michigan: Sophomore Honors Award (1997), graduated with high distinction in Astronomy and Astrophysics, Phi Beta Kappa (1999)	
ACADEMIC EXPERIENCE	University of Hawai'i at Mānoa , Honolulu, Hawai'i USA <i>Graduate Student</i> August, 1999 - present Includes current Ph.D. research, Ph.D. and Masters level coursework and research projects. <i>Teaching Assistant for Antoinette Songaila and David Jewitt</i> August, 1999 - May 2000 Duties including assignment and exam grading, leading review sessions, office hours, some minimal lecturing.	
PUBLICATIONS	Novicki, M.C. , Stephens, A., Boesgaard, A.M., & Deliyannis, C. 2004 The Lithium Plateau at Low Metallicities. (in prep) Bregman, J.N. , Novicki, M.C. , Krick, J.E., & Arabadjis, J.S. 2003. Small-Scale Structure in the Galactic Interstellar Medium: Implications for Galaxy Cluster Studies, <i>ApJ</i> , 597, 399 Novicki, M.C. , Sornig, M., & Henry, J.P. 2002. The Evolution of the Galaxy Cluster Luminosity-Temperature Relation. <i>AJ</i> , 124, 2413	
CONFERENCE PRESENTATIONS	Novicki, M.C. , Boesgaard, A.M., Stephens, A., Deliyannis, C.P., & King, J.R. 2004. Lithium and Oxygen in Low Metallicity Halo Stars. AAS, 204.0714N Novicki, M.C. , & Tonry, J. 2000. The Flux Differences Method for Supernova Ia Light Curves. AAS, 19710405 Novicki, M.C. , Jones, C., Donnelley, R.H. 1999. A Search for X-Ray Filaments in Galaxy Clusters. AAS, 193.3807	

RESEARCH
EXPERIENCE

University of Hawai'i at Mānoa, Honolulu, Hawai'i USA

Research Assistant for Ann M. Boesgaard **November 2002 - present**
Determination of the abundances of Li, Be, and B of low metallicity stars using spectra from Keck HIRES, Subaru HDS, and HST. Done in conjunction with my thesis work.

Research Assistant for J. Patrick Henry **August 2000 - October 2002**
Statistical analysis of temperature and luminosity data from the ASCA satellite on galaxy clusters of a range in redshift. Redshift survey of the North Ecliptic Pole Supercluster (former thesis project, ended for logistical reasons).

Research Project with John Tonry **January 2000 - February 2001**
Investigated a new analysis technique for lightcurve fitting in conjunction with the High-Z Supernova Team 1999 survey which is now in regular use by the High-Z Supernova Team and others. Reduced imaging data from the Keck, UH 88", and the VLT telescopes.

The University of Michigan, Ann Arbor, Michigan USA

Senior Thesis/Summer Research with Joel N. Bregman **September 1998 - July 1999**
Analyzed X-ray data taken with the ROSAT satellite on three galaxy clusters with evidence for large scale filaments relating to galaxy cluster mergers. Analyzed X-ray hardness ratios for several galaxy clusters for comparison with Galactic HI data in the same region on the sky.

Research Experience for Undergraduates with Fred Bechetti **September 1998 - May 1999**
Developed a website for the TwinSol project.

Student Research with Gary Bernstein **September 1997 - June 1998**
Made a false-color mosaic of the Tarantula Nebula (30 Doradus) from data taken in three passbands (BRI) with the Big Throughput Camera on the Blanco Telescope in Chile. This image has been featured on the Astronomy Picture of the Day website (<http://antwrp.gsfc.nasa.gov/apod/ap991026.html>).

Harvard-Smithsonian Center for Astrophysics, Cambridge, Massachusetts USA

Research Experience for Undergraduates with Christine Jones **June - August 1998**
Reduced and analyzed X-ray data from the ROSAT satellite. Using wavelet decomposition techniques, searched for evidence of large scale filaments near galaxy clusters. Continued on with this research for my senior thesis.

COMPUTER SKILLS

- Languages: C, some IDL, some use of Unix shell scripts (sed, awk), HTML
- Data Reduction Packages: IRAF, Makee, XSPEC, Vista
- Applications: L^AT_EX, SM, Mongo, WIP, MOOG, Mspawn72, common Windows word processing, spreadsheet, and presentation software, Adobe Photoshop, some Adobe Illustrator
- Algorithms: Experience programming Monte Carlo simulations for error estimation
- Operating Systems: Unix, Windows, some Macintosh.

OTHER WORK
EXPERIENCE

- Developed and maintained the website for the Astronomy Department at the University of Michigan (September 1998 - July 1999)
- Computer Consultant at the University of Michigan Business School (Mac and PC consulting) (September 1996 - May 1997)
- Lifeguard and swim instructor at the YMCA (summers 1995 - 1998)

PROFESSIONAL
MEMBERSHIPS

- American Astronomical Society
- Phi Beta Kappa