

# CURRICULUM VITAE

## Xi Chen

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### RESEARCH INTERESTS

Cosmic microwave background data analysis, properties of extragalactic radio sources, large scale structure formation

### EDUCATION

2003 – present      **University of California, Los Angeles (UCLA)**  
Ph.D. Candidate, Astrophysics  
Advisor: Prof. Edward L. Wright  
Topic: “A CMB Foreground Study in WMAP Data: Extragalactic Point Sources and Zodiacal Light Emission”  
M.S., Astrophysics  
Advisor: Prof. Edward L. Wright  
Topic: “Search for Extragalactic Point Sources in WMAP First Year Data”

1998 – 2003      **University of Science and Technology of China (USTC)**  
B.S., Astrophysics  
Advisor: Prof. Longlong Feng  
Topic: “Calculating Dark Matter Power Spectrum under Halo Models”

### HONORS AND AWARDS

2007      **UCLA**  
Richardson Conference Travel Award

2005 – 2006      Department Nonresident Tuition Fellowship

2003 – 2004      University Fellowship  
Graduate Division Nonresident Tuition Fellowship  
Department Nonresident Tuition Fellowship

2003      **USTC**  
Outstanding Graduate Award

1998 – 2002      Academic Excellence Scholarship

1998      University Freshman Fellowship

### RESEARCH APPOINTMENTS

2004 – present      **Graduate Student Researcher, UCLA**

- Estimation of the zodiacal light emission (ZLE) at the WMAP 94 GHz channel, with the goal of setting the limits for the ZLE in WMAP data.

- Radio observations to search for low frequency counterparts of WMAP point sources using VLA, CARMA and ATCA.
- Search for extragalactic point sources in the WMAP 41, 61 and 94 GHz temperature maps in order to: develop and test a new detection method, allow better separation of extragalactic sources from the CMB data, and put constraints of the unresolved source contamination on CMB angular power spectrum.

2002 – 2003

**Undergraduate Student Researcher, USTC**

Department of Astronomy and Applied Physics

- Dark matter power spectrum calculations using different halo models in a  $\Lambda$ CDM universe.

2000 – 2001

**Undergraduate Student Researcher, USTC**

Department of Modern Physics

- Helped to build the infrastructure of the fast-electron energy-loss spectroscopy in the (e, 2e) lab.

**TEACHING EXPERIENCE**

2006

**Lead Teaching Assistant, UCLA, fall quarter**

Taught weekly lab sessions for ASTR 3, organized weekly professor and TA meetings, coordinated lab sessions and materials, oversaw six graduate student TAs and three undergraduate student graders.

2006

**Teaching Assistant, UCLA, spring quarter**

Taught weekly recitation sessions for ASTR 6, an introductory cosmology course for non-science majors.

2004

**Teaching Assistant, UCLA, winter and spring quarters**

Taught weekly lab sessions for ASTR 3, an introductory astronomy course for non-science majors.

**SERVICE AND OTHER EXPERIENCES****Professional memberships**

2005 – present

American Astronomical Society

**Departmental Service**

2004 – present

**Presenter, UCLA Planetarium.**

Present planetarium and telescope shows for school groups and the public.

2006 – 2007

**Astrophysics Journal Club Coordinator, UCLA**

Organized weekly speakers and coordinated catering.

- 2006 – present      **Community Service**  
**Unit Representative**, UCLA University Apartments South Residents Association  
 Plan events for university apartments residents, bridge communication between residents and management of school housing.
- 2003 – 2005      **Activity Director**, UCLA Chinese Students and Scholars Association  
 Organized events for Chinese community at UCLA and promote culture exchanges among Chinese, US and other international students.

## PUBLICATIONS

- 2008      **Chen, X.**; Wright, E. L.; “*Extragalactic Point Source Search in Five-Year WMAP 41, 61 and 94 GHz Maps*”, 2008, The Astrophysical Journal, in press (2008arXiv0809.4025C)
- 2008      Wright, E. L.; **Chen, X.**; Odegard, N.; Bennett, C. L.; Hill, R. S.; Hinshaw, G.; Jarosik, N.; Komatsu, E.; Nolta, M.R.; Page, L.; Spergel, D. N.; Weiland, J. L.; Wollack, E.; Dunkley, J.; Gold, B.; Halpern, M.; Kogut, A.; Larson, D.; Limon, M.; Meyer, S. S.; Tucker, G. S.; “*The Wilkinson Microwave Anisotropy Probe (WMAP) Source Catalog*”, 2008, The Astrophysical Journal Supplements, in press (2008arXiv0803.0577W)
- 2008      **Chen, X.**; Wright, E. L.; “*Extragalactic Point Source Search in WMAP 61 and 94 GHz Data*”, 2008, The Astrophysical Journal, 681, 747C

## TALKS AND POSTERS

- 2008      Talk: *Finding Extragalactic Point Sources in WMAP Temperature Maps: A CMB-independent Technique*, CMB Component Separation and the Physics of Foregrounds Conference, Pasadena
- 2008      Invited Talk: *A CMB-Free Method to Find Extragalactic Point Sources in WMAP Data*, Planck ERCSC/CSI Workshop, Infrared Processing and Analysis Center
- 2008      Poster: *Point Source Correction and the Galaxy-reduced Map from WMAP 3-yr Data*, American Astronomical Society 211<sup>th</sup> Meeting, Austin
- 2007      Talk: *Radio Observations on Four Sources Detected in the WMAP V- and W-band Data*, American Astronomical Society 210<sup>th</sup> Meeting, Honolulu
- 2007      Poster: *Search for Extragalactic Point Sources using WMAP Q-, V- and W-band Data*, American Astronomical Society 209<sup>th</sup> Meeting, Seattle
- 2006      Poster: *Search for Extragalactic Point Sources in WMAP First Year Data*, American Astronomical Society 207<sup>th</sup> Meeting, Washington DC