Zhiqi Huang Curriculum Vitae

CONTACT INFORMATION EDUCATION

School of Physics and Astronomy, Sun-Yat Sen

University Email: huangzhq25@sysu.edu.cn

Zhuhai, 519080, CHINA URL: www.cita.utoronto.ca/~zqhuang

Ph.D. in Department of Astronomy & Astrophysics, University of Toronto (Sept 2005 - Aug 2010)

• Thesis Topic: Probing Early and Late Inflations Beyond Tilted ΛCDM.

• Advisors: Prof. J. Richard Bond & Prof. Lev Kofman

• Area of Study: Cosmology

Master of Science in Department of Astronomy& Astrophysics, Collabrative Astronomy and Astrophysics / Physics / CITA Programme, University of Toronto (March 2006)

• Thesis Topic: Reconstructing dark energy EOS

• Advisor: Prof. Charles Dyer

• Area of Study: Cosmology, General Relativity

Bachelor of Science in Department of Physics, Peking University (June 2004)

• Major: Physics

• Advisor: Prof. Zhongshui Ma

Publications Awards and

Honors

 $\label{eq:conto.ca} \begin{tabular}{ll} Updated at http://www.cita.utoronto.ca/\sim zqhuang/work. \end{tabular}$

Scholarships/Fellowships

- Thousand Youth Talents Plan, 2015, CHINA
- Beatrice Tremain Fellowship, 2015, CANADA
- The Eurotalent fellowship, 2010-2012, FRANCE
- The Carl Reinhardt Fellowship in Astronomy, 2008, CANADA
- The Frank S.Hogg Memorial Fellowship, 2007, CANADA
- The Shirley Jones Fellowship, 2006, CANADA
- The Frank S.Hogg Memorial Fellowship, 2006, CANADA
- The C.A. Chant Fellowship, 2005, CANADA
- The Carl Reinhardt Fellowship in Astronomy, 2005, CANADA
- The Guanghua Fellowship, 2002, CHINA
- New Student Scholarship, 2000, CHINA

Awards

• Gold Medal (4th place) at the fifteenth Chinese Mathematics Olympiad (CMO 2000)

ACADEMIC EXPERIENCE

Memberships: PLANCK Satellite HFI Core Team; EUCLID Satellite Theory Group; ACTPol Team member; SPIDER team

Professor, PhD advisor: Sun-Yat Sen University, Jul 2016 - present

Postdoc: Canadian Institute for Theoretical Astrophysics (CITA), Aug 2013 - June 2016

Postdoc: Institut de Physique Théorique, CEA/Saclay, Oct 2010 - Jul 2013

Referee: The Journal of Cosmology and Astroparticle Physics (JCAP); The Astrophysical Journal (ApJ)

Organizer: cosmology theory journal club at IPhT, CEA/Saclay (2010 Oct - 2012 Aug).

Conferences Organized

CITA@25/Bond@60, the 19th Kingston Meeting, CITA, University of Toronto, May 2010

CONFERENCES AND WORKSHOPS ATTENDED

CAS 2015, Oct 2015, Peking University, Beijing, China

COSMIC FLOWS (AND OTHER NOVELTIES ON LARGE SCALES), Aug 2015, Perimeter Institute

CASCA 2015, May 2015, McMaster University, CANADA

Planck HFI core-team meeting, May 2015, Paris, FRANCE

COSMO 14, August 2014, Chicago, USA

Planck HFI core-team meeting, Nov 2013, IAP, Paris

Cosmology and fundamental Physics with Planck, June 2013, CERN, Switzerland

Critical Tests of In ation Using Non-Gaussianity, Nov 2012, MPA, Munich

Present and Future of 2nd order CMB, Nov 2013, IPhT, CEA/Saclay, FRANCE

Planck HFI core-team meeting, Nov 2013, IAP, Paris

Cosmology and fundamental Physics with Planck, June 2013, CERN, Switzerland

Planck HFI core-team meeting, July 2013, IAP, Paris

Planck HFI core-team meeting, April 2013, IAP, Paris

Critical Tests of Inflation Using Non-Gaussianity, Nov 2012, MPA, Munich.

COSMO 12, Beijing, Sept 2012

The Heart of Darkness: Dark Energy and Gravity, June 2012, IPhT, CEA/Saclay.

Rencontres de Moriond 2012, March 2012, La Thuile, Aosta valley, Italy

The Dark Universe, Oct 2011, Heidelberg

COSMO 10, Sept 2011, Porto

IPhT/LPT COSMO meeting, Dec 2010, Université Paris-Sud 11, Orsay

CITA@25/Bond@60, the 19th Kingston Meeting, CITA, University of Toronto, May 2010

COSMO 09, CERN, Sept 2009

Particle Cosmology workshop, CERN, Sept 2009

CASCA, University of Toronto, May 2009

The TEXAS Symposium on Relativistic Astrophysics, Vancouver, Dec 2008

COSMO 08, Aug 2008, Madison

Workshop on Parallel Computing in Astrophysics, University of Toronto, July 2008

Upcoming Lensing Surveys: Beyond the Obvious, University of Toronto, June 2008

String Theory and Cosmology, Kavli Institute for Theoretical Physics China, Nov 2007

COSMO 07, Aug 2007, Sussex

RECENT TALKS

- Hondeski Gravity and Anomalies
 - CAS 2015, DAA Peking University, NAOC, Oct 2015
- Stacking, Inpainting and CMB Anomalies
 - CASCA 2015, May 2015; McMaster University
- Cosmology after Planck: Parameters, Power Spectra and Anomalies
 - SHAO, Shanghai, March 2015; CAA, Shanghai, March 2015
- ACT map Stacking
 - ACTPol Collaboration Meeting, Princeton, February 2015
- Stacking of Planck 2014 temperature, polarization and primordial curvature maps
 - \bullet PLANCK 2014, The microwave sky in temperature and polarization, Ferrara, November, 2014
- Stacking and CMB Anomalies
 - COSMO14, Chicago University, August 2014
- Inflationary Trajectories after Planck and BICEP2
 - Simon Fraser University, April 2014
- Chameleons in the Early Universe
 - DAA, University of Toronto, Oct 2013

Second-order Boltzmann code and CMB Bispectrum

• CERN, Switzerland, June 2013

Second-order Boltzmann code and CMB Bispectrum

• SPP, CEA/Saclay, April 2013

Second-order Boltzmann code and CMB Bispectrum

• IAP, Paris, Feb 2013

Second-order Boltzmann code and CMB Bispectrum

• APC, Paris, Jan 2013

Second-order Boltzmann code and CMB Bispectrum

• COSMO 12, Sept 2012

Measuring the Features in the Primordial Power Spectrum

• Rencontres de Moriond, March 2012

Future LSS Survey and Inflation Models

• DAMTP seminar, Cambridge, Nov 2011

Future LSS Survey and Inflation Models

• The Dark Universe, HeidelBerg, Oct 2011

Future LSS Survey and Inflation Models

• Seminar, IPhT CEA/Saclay, Oct 2011

The Dark Energy Trajectories in the post-EUCLID era

• CITA seminar, Toronto, April 2011

The Art of Lattice and Gravity Waves from Preheating

• IPhT/LPT COSMO meeting, Université Paris-Sud 11, Orsay, Dec 2010

Dark Energy Trajectories and Cosmic Observables

• CITA@25/Bond@60, CITA, University of Toronto, May 2010

Primordial Power Spectra and Cosmological Observations

• CITA-PI day, Perimeter Institute, Waterloo, Dec 2009

Non-Gaussianity from Preheating

• Graduate Student Seminar Talk, University of Toronto, Sept 2009

Non-Gaussian Spikes from Chaotic Billiards in Inflation Preheating

• Contributed talk at the Particle Cosmology workshop, CERN, Sept 2009

Non-Gaussian Spikes from Chaotic Billiards in Inflation Preheating

• Contributed talk at CASCA 2009

Non-Gaussianity from Preheating

• Contributed talk at the TEXAS Symposium 2008

Parameterizing Dark Energy

• Invited colloquium talk, Case Western Reserve University, Sept 2008

OUTREACH

Organizer: Lunar Eclipse View Party, Toronto, 27 Sept 2015

Telescope Operator, Nuit Blanche Exhibitions in Toronto, Oct 2009

Public talks in Downtown Astronomy monthly **public tour** organized by Department of Astronomy & Astrophysics at University of Toronto.

- Modern Cosmological Observations (Dec 2007)
- The History of Gravity (Dec 2006)

SKILLS AND HOBBYS

My native language is Chinese (Mandarin). I speak fluent English and a little bit French and Cantonese.

Rich parallel (MPI and OpenMP) programming experience in C and Fortran.

For "daily-life programming", I am a pythonist (also use mathematica for analytic stuff).

Dynamic website design and html, javascript, and PHP + MySQL database programming. I am the builder of the Chinese chess end game online database (http://www.ok667.net/zqhuang).

Love to use Linux system.

Photo editing and video clipping (just for fun...I am not an artist).

Familiar with many statistical approaches: Markov Chain Monte Carlo simulation; Fisher Matrix analysis; and model selection through Bayesian evidence analysis.

I play the ancient Chinese game Go (KGS 3d) and almost all other popular board games. Ski, soccer, volleyball, cycling, rollerblading are my favorite sports.