

## Curriculum Vitae

**Rupert A.C. Croft**

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### Personal

Date of birth: 19th April, 1970; UK Citizen, US permanent resident.

### Education

- 1991 – 1995 : D.Phil (1995) in Astrophysics, Oxford University.  
Advisor: Prof. George Efstathiou.  
Title: “Galaxy clusters and the Formation of Large-Scale Structure in the Universe”.
- 1988 – 1991 : B.Sc (Hons, 1st class) in Physics, Imperial College.

### Positions

- 07/14 – : Professor,  
Physics Department, Carnegie Mellon University.
- 01/12 – 08/12 : Leverhulme Visiting Professor,  
Physics Department, Oxford University
- 07/09 – 07/14 : Associate Professor with tenure,  
Physics Department, Carnegie Mellon University.
- 09/04 – 07/09 : Associate Professor without tenure,  
Physics Department, Carnegie Mellon University.
- 09/01 – 08/04 : Assistant Professor,  
Physics Department, Carnegie Mellon University.
- 09/98 – 08/01 : Postdoctoral Research Associate,  
Harvard-Smithsonian Center for Astrophysics.
- 09/95 – 08/98 : Postdoctoral Researcher,  
Astronomy Department, Ohio State University.

### Graduate students advised

Name	Dates	Thesis/Project	Remarks
Young-Rae Kim	09/2001-10/2006	“New Probes of Dark Matter and Dark Energy”	Now researcher at KIAS
Soma De	09/2003-06/2005	“Morphology of Large-scale structure “	Transferred to Univ. OK. now PD at ETH Zurich
Gabriel Altay	01/2005-09/2009	“Cosmological Radiative Transfer”	Narrative Science (AI software)
Yu Feng (joint)	01/2010- 07/2014	“Matter and radiation in Cosmology ”	UC Berkeley Postdoc
Melih Ozbek	09/2011-	“Mapping the IGM	current
Hongyu Zhu	01/2014-	“Gravitational redshifts”	current
Siddarth Satpathy	08/2016-	“Quasars and baryon oscillations”	current

### Postdocs sponsored

09/02 – 09/03 : Taotao Fang (Now faculty at Xiamen)  
09/04 – 09/05 : Shwetabh Singh (Industry)  
09/05 – 09/07 : Joerg Colberg (jointly sponsored, now faculty at U. Hartford)  
10/06 – 09/07 : Young-Rae Kim (Now at KIAS)  
10/07 – 04/08 : Inti Pelupessy (Now at Leiden)  
10/09 – 09/12 : Nishikanta Khandai (jointly sponsored, now faculty at NISER)  
11/15 – : Elena Giusarma

## Undergraduate research students

Name	Dates	Project
Ryan Marsh	2001	Crater formation in rubble-pile asteroids
Robert Murray	2002	Hydrodynamic simulations of galaxy clusters
Sunya Boonyatara	2003	Galaxy collisions
Shiu Fai (Frankie) Li	2004-2005	Galaxy shapes
Eli Visbal	2005-2007	Quasar Light Echoes
Garrett Mitchell	2007-2008	Bubble formation during reionization
Josh Ilany	2008	Detection of photoionized voids in quasar spectra
Omar Shams	2007-2008	3 point correlation function of 21cm emission
Fiona Ding	2008	Dark energy and quasar parallax
Aaron Hensley	2009	Higher order clustering during reionization
Dimitry Ayzenberg	2009-2010	Terrestrial planet formation
Ben Greer	2009-2010	Adapting a cosmological hydrodynamic code for planet formation
Andrew Wesson	2009-2010	Cosmic variance and supernova measurements of dark energy
Vir Anand	2010	Measuring the deuterium abundance from SDSS spectra
Andrew Johnson	2010	Large-scale simulation visualization
John Wu	2011-	Imaging the Sloan Digital Sky Survey
Matt Dailey	2010-11	Meta-analysis of cosmological parameter determinations
Nathan Bernier	2010-11	Measurement of galaxy gravitational redshifts
Joseph Vukovich	2011	3D structure of the intergalactic medium
James Komianos	2011-12	Graphics processing unit computation in cosmology
Greg Bernero	2012-14	Higher order moments of Ly $\alpha$ forest
Samuel Greess (joint)	2013-2014	Black holes and large-scale structure
Raphael Segal	2015	Galaxy formation
Peter Lee	2015	Galaxy formation and outreach
Luka Jelenak	2016	Galaxy formation and outreach
Doyee Byun	2017	Galaxy formation and outreach

## Graduate student thesis committees

Student	Institution	Defense Date
Shane Zabel	CMU	2003
Dan Nestor	UPitt	2004
Young-Rae Kim	CMU	2006
Gauri Kulkarni	CMU	2006
Kivanc Sabirli	CMU	2006
Umami Abbas	UPitt	2006
Michelle Belfort	UPitt	2007
Niraj Welikala	UPitt	2008
Samuel Schmidt	UPitt	2008
Cameron McBride	UPitt	2009
Yi-Cheng Huang	UPitt	2011
Khee-Gan Lee	Princeton	2011
Brian Cherinka	UPitt	2011
Andrew Hearin	UPitt	2012
Chengdong Li	UPitt	2012
Shailendra Vikas	UPitt	2013
Timothee Delubac	Univ. Paris	2013
You-Cyuan Jhang	CMU	2013
Dan Matthews	UPitt	2014
Gendith Sardane	UPitt	2015
Elizabeth Blair	UPitt	2017
Ananth Tenneti	CMU	2016
Sumit Sarbadhicary	UPitt	2017
Sukdheep Singh	CMU	2016
Hsiu-Hsien Lin	CMU	2017
Paul LaPlante	CMU	2016
Zhonghao Luo	CMU	2017
Shadab Alam	CMU	2016