

Dr. Simeon Bird (sbird@ucr.edu)

Address            Dept. of Physics & Astronomy, 3401 Watkins Drive, Riverside, CA 92521

#### Research Interests

Numerical cosmology, massive neutrinos, the Lyman- $\alpha$  forest, primordial black holes, circumgalactic medium.

#### Employment and Education

2018-            Assistant Professor at UC Riverside  
2015-2017       Einstein Fellow at Johns Hopkins University  
2014-2015       McWilliams Fellow, Carnegie Mellon University  
2011-2014       Member, Institute for Advanced Study (IAS), Princeton  
2011            Ph.D. in Astronomy, University of Cambridge  
                  Thesis: “Constraining Fundamental Physics From Cosmology”  
                  Advisors: Prof. Hiranya Peiris and Prof. Martin Haehnelt  
2010            M.A., University of Cambridge  
2007            M. Math with Distinction, University of Cambridge  
                  Part III Essay: “Non-Gaussianity from Inflation”  
                  Advisor: Dr. Paul Shellard  
2006            B.A. in Mathematics with Honours, University of Cambridge  
                  First Class Degree from Pembroke College

#### Press Releases

“Did Gravitational Wave Detector Find Dark Matter?” featured in New Scientist, Reddit, National Geographic, Washington Post, La Repubblica, Ciel et Espace, Vice.com, Forbes.com, the Mail Online, Symmetry and Nature.

#### Talks

Invited talks on Primordial Black Hole Dark Matter: Harvard, Perimeter and Syracuse.

Invited talks on Damped Lyman- $\alpha$  Systems: UC Berkeley.  
                  Conferences in Heidelberg, Germany and Notre Dame, IN.

Invited talks on Neutrinos: U. Chicago, U. Pennsylvania. Workshop in Valencia, Spain.

Other invited talks: Leicester University and UKCosmo meeting, Manchester.

Outreach talks: Allegheny Observatory, Pittsburgh, PA, and Cambridge University, UK.

Contributed Seminars: Numerous. Including Princeton, Yale, Harvard and Caltech.

#### Advising Experience

2016            Max Gronke, PhD student visiting Johns Hopkins.  
                  “Giant Lyman-Alpha Nebulae in the Illustris Simulation” (Gronke et al 2016, submitted to ApJ)

- 2016 Cyril Creque-Sarbinowski, REU student, Johns Hopkins.  
“Cross-correlation between tSZ effect and the ISW effect”  
(Creque-Sarbinowski et al 2016, PRD 94 no. 6, 063519).
- 2015 Alex Gurvich, REU student, Harvard CfA.  
“The Column Density Distribution of the Low-Redshift Lyman-Alpha Forest  
in Illustris” (Gurvich et al 2016, submitted to ApJ)
- 2014 Joshua Suresh, PhD student at Harvard CfA.  
“The Impact of Galactic Feedback on the Circumgalactic Medium” (Suresh et  
al 2015, MNRAS 448, p895-909)
- 2014 Kunting Eddie Chua, under Prof. Hernquist, Harvard CfA, research exam.

Publications Total number of publications: 39  
Number of first-author publications: 11

#### Awards

- 2007 Tyson Medal, University of Cambridge  
Awarded only at the discretion of the examiners to the best-performing un-  
dergraduate student in Part III for subjects related to astronomy.
- 2007 Atiyah Prize, Pembroke College Cambridge
- 2006 Foundation Scholarship, Pembroke College Cambridge
- 2006 College Prize, Pembroke College Cambridge
- 2003-2007 Isaac Newton Trust Bursary, University of Cambridge

#### Skills

- Programming Extensive C++, Python, MPI.
- Languages Intermediate French and Italian, Basic German

#### Professional Service

- 2013 Informal Seminar organiser, IAS Astrophysics
- 2012 Cosmology Lunch organiser, IAS Astrophysics and Princeton Astronomy
- 2008-2011 Student Representative, Cambridge IoA Computing Advisory Committee
- 2011-present Referee for PRL, PRD, ApJ, MNRAS, JCAP