

# Chuanwu Liu

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## EDUCATION

**Ph.D. in Astrophysics, The University of Melbourne, Australia** 2013 — 2016  
Thesis: “Galaxy observables during the epoch of reionization from semi-analytic models”  
Advisors: Prof. Stuart Wyithe and Dr. Simon Mutch

**M.Sc. in Astrophysics, Peking University, China** 2009 — 2012  
Thesis: “The dynamical evolution of rotating star clusters with primordial binaries”  
Advisors: Prof. Rainer Spurzem and Dr. M.B.N Kouwenhoven

**B.Sc. in Theoretical Physics, Lanzhou University, China** 2004 — 2008  
Thesis: “Preparation of alumina nanopowders”  
Advisor: Prof. Jiangong Li

# EXPERIENCE

**Product engineer, Shroogal Pty Ltd, Melbourne** 2/2017 — Present

- Develop and implement algorithms for tax functions and financial projections;
- Generate client's financial circumstances through simulations.

Research assistant, *DRAGONS* project (<http://dragons.ph.unimelb.edu.au>) 5/2013 —  
2/2017

**Research assistant, *Silk Road* project (<http://silkroad.bao.ac.cn/web>)**      2/2011 — 12/2012

- Designed and ran  $N$ -body simulations of stellar systems;
- Studied the dynamical evolution of star clusters and their binaries.

## PROGRAMMING SKILLS

**Proficient:** Fortran, C, Python, Linux Shell

**Intermediate:** C++, IDL, Excel

## **AWARDS**

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Melbourne International Engagement Awards	2013 — 2016
Melbourne International Fee Remission Scholarship	2013 — 2016
Academic Scholarships (Class II) of Peking University	2009 — 2012
Wusi Awards of Peking University	2011

## **PUBLICATIONS**

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*Dark-ages reionization and galaxy formation simulation-IV. UV luminosity functions of high-redshift galaxies*

**Liu C.**, Mutch S. J., Angel P. W., Duffy A. R., Geil P. M., Poole G. B. Mesinger A., Wyithe J. S. B., 2016, MNRAS, 462, 235 [[link](#)]

*Dark-ages reionization and galaxy formation simulation-VI. The origins and fate of the highest known redshift galaxy*

Mutch S. J., **Liu C.**, Poole G. B., Geil P. M., Duffy A. R., Trenti M., Oesch P. A., Illingworth G. D., Mesinger A., Wyithe J. S. B., 2016, MNRAS, 463, 3556 [[link](#)]

*Dark-ages reionization and galaxy formation simulation-VII. The sizes of high-redshift galaxies*

**Liu C.**, Mutch S. J., Poole G. B., Angel P. W., Duffy A. R., Geil P. M., Mesinger A., Wyithe J. S. B., 2017, MNRAS, 465, 3134 [[link](#)]

## **REFEREES**

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### **Prof. Stuart Wyithe** (Supervisor)

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### **Dr. Simon Mutch** (Co-supervisor)

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