

GREGORY B. POOLE

Email: gpoole@swin.edu.au | Website: www.astronomy.swin.edu.au/~gpoole/ | Code Repository: github.com/gbpoole
Phone: +61 (04) 4919-5630 | Address: Mail H29, Swinburne University of Technology, Box 218, Hawthorn, Vic, Australia, 3122

EDUCATION

UNIVERSITY OF VICTORIA

PhD in Astrophysics

Victoria, British Columbia, Canada

September 1999 – December 2006

- Awarded the Governor General's Gold Medal, in part due to a perfect Grade-Point Average (GPA).
- My thesis (entitled "The Impact of Mergers on Relaxed X-ray clusters") presented a detailed analysis of hydrodynamical simulations of collisions between galaxy clusters; the largest bound objects in the Universe.
- For more information, see www.astronomy.swin.edu.au/~gpoole/thesis.html.

UNIVERSITY OF TORONTO

MSc in Astrophysics

Toronto, Ontario, Canada

September 1998 – August 1999

- My thesis (entitled "A Ray Optics Formalism for Wave Tails") developed a mathematical formalism for accurately describing the propagation of beams of light in curved space-times.

UNIVERSITY OF WATERLOO

BSc in Applied Physics

Waterloo, Ontario, Canada

September 1992 – April 1997

- This cooperative degree also provided 2 years of work experience in the telecommunications, remote sensing and health research industries.

POSTGRADUATE WORK EXPERIENCE

SWINBURNE UNIVERSITY OF TECHNOLOGY

Lead Engineer, Computational Astronomy

Melbourne, Victoria, Australia

February 2019 – present

- Architect and program manager for the ADACS (adacs.org.au) Merit Allocation Program (MAP); a highly regarded national program delivering training and research software solutions - from mobile apps to high-performance computing optimisations - for Australian astronomers.
- Manage the daily operations of ~15 dedicated professionals: software engineers, computationally skilled scientists, and certified software specialists (e.g., user experience and Agile product discovery & delivery).

SWINBURNE UNIVERSITY OF TECHNOLOGY

Senior Project Scientist

Melbourne, Victoria, Australia

March 2017 – February 2019

- Contributing software developer for Astronomy Data and Computing Services (ADACS; see adacs.org.au).
- Delivered software solutions for GPU optimisation projects
- Developed and managed the ADACS Merit Allocation Program, conducting all relevant stakeholder engagement.

UNIVERSITY OF MELBOURNE

Postdoctoral Researcher

Melbourne, Victoria, Australia

July 2012 - Dec 2016

- Lead simulator for Prof. Wyithe's DRAGONS Laureate program.
- Managed the creation and lead all software development for the Tiamat simulation suite: a unique resource for studying galaxy formation in the early Universe.
- Co-supervised one graduate student to completion: Paul Angel (PhD).
- Conducted lectures to both non-science-major undergraduate, and astronomy graduate students.
- For more information about Tiamat, see www.astronomy.swin.edu.au/~gpoole/Tiamat.html.

SWINBURNE UNIVERSITY OF TECHNOLOGY

Postdoctoral Researcher

Melbourne, Victoria, Australia

July 2007 – July 2012

- Lead theorist for the WiggleZ Dark Energy Survey (see wigglez.swin.edu.au for details).
- Designed & created the Gigaparsec WiggleZ (GiggleZ) simulation: the first-ever Australian "grand-challenge" (>10 billion particle) cosmology simulation (see www.astronomy.swin.edu.au/~gpoole/GiggleZ.html for details).
- Co-supervised two graduate students to completion: Peter Jensen (MSc) and Simon Mutch (PhD).

PUBLICATIONS

A publication list is available upon request or from my website at: www.astronomy.swin.edu.au/~gpoole/about_me.html.

— This document is current as-of 16 February 2026 —