Jacob Buete

Curriculum Vitae

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Education

2013–2016 Bachelor of Science (Advanced) (Honours), The Australian National University, Canberra,

ACT, HD-average.

o Major: Theoretical Physics

Specialisation: Advanced Physics

Minor: Mathematics

• Honours: Astronomy and Astrophysics (graduating in December 2016)

Honours Thesis

title A Realistic Sub-grid Supernovae Implementation for Exploring Supernova Driven Turbulence

supervisors Dr Christoph Federrath

description Implemented an analytical supernova model in a FORTRAN-based hydrodynamics codebase that

employs adaptive mesh refinement, FLASH. (jbuete.com/honours)

Experience

2016 **IT Assistant**, Bruce Hall, Canberra.

Worked as part of the student IT team at Bruce Hall.

Job Details:

- Worked as a liason for Bruce Hall and ANU IT services;
- Fixed technology-related issues encountered by students and Bruce Hall admin;
- Ran Bruce Hall's internal website, including:
 - Writing Python scripts to update MySQL database of student information;
 - Created video series to teach student leadership team how to create and format articles on the site.

Open Source Projects

FlashPy.

FlashPy is a Python module designed to interface with the HDF5 output files produced by FLASH simulations. The module provides automated analysis and visualisation tools for use in research. (github.com/JBuete/FlashPy)

Languages

Highly Python, FORTRAN, Bash

Experienced

Moderately C, Java, Haskell

Experienced

Some Javascript, Ruby, PHP

Experience