Applications are invited for a post-doctoral position that has been funded as part of an Australian Research Council grant awarded to Professors Warrick Couch and Kenji Bekki to study evolution of galaxies in groups. The main focus of the research will be to elucidate the physical mechanisms responsible for the significant transformation of spiral galaxies into S0 galaxies within these environments over the last ~5 billion years. This will be tackled through the combination of major observational and numerical simulation studies. The former will involve the acquisition of spatially resolved (2D) integral field spectroscopy of a large sample of nearby group galaxies as part of the SAMI IFU Galaxy Survey (see www.sami-survey.org). The latter will involve the production of a comprehensive set of chemodynamical simulations of the different physical mechanisms thought to be acting in groups, that will provide clear predictions of the observational signatures that should be seen in each case. The position advertised here is primarily to assist with and take a leading role in the observational component of this project.

The appointee will be based in the Centre for Astrophysics and Supercomputing at Swinburne University, working under the supervision of Prof Couch. However, he/she will be expected to make regular visits to both the University of Western Australia (for meetings with Prof Bekki) and to the 3.9m Anglo-Australian Telescope at Siding Spring Observatory, to assist with SAMI Survey observations. In addition, he/she will be an active member of the SAMI Survey team, participating in planning and science meetings when required.

The Centre for Astrophysics and Supercomputing at Swinburne University is one of Australia's largest astronomy groups, with over 30 staff/postdocs and 30 PhD students from more than 20 different countries. Swinburne holds an agreement with Caltech guaranteeing it 15 nights per year on the 10m Keck telescopes. CAS operates its own GPU-rich supercomputing facility and an HD 3D "Virtual Reality" theatre. It has a lively research culture with weekly discussion groups and hosts many international speakers/visitors each year. The campus is located in the cosmopolitan and diverse inner-Melbourne suburb of Hawthorn.

Essential criteria: A PhD in observational extragalactic astrophysics; strong research skills and a demonstrated publication track record in peer-reviewed journals; excellent oral and written communication skills. Experience in 2D IFU spectroscopy and/or large spectroscopic galaxy surveys is desirable.

Swinburne is a 2012 Federally-recognised "Employer of Choice for Women" and encourages applications from indigenous people, people from culturally and linguistically diverse backgrounds, people with disabilities, women and men.

Applications should be sent by email and must include a CV, bibliography, and statement of research interests. Applicants should arrange to have three references sent to Prof W Couch at the above address by the application deadline of 1 February 2013. Applications in PDF format are preferred.

Appointment will initially be for two years, with the possibility of a further year extension subject to funding and performance. Remuneration includes a base salary in the range AUD70,174 - 75,289 (Australian dollars) per annum, depending on experience, plus standard 4-week annual leave and a generous 17% superannuation entitlement.