Dec 2008-Feb 2009 Internships

Applications for financial support close October 31, 2008

Internships are being offered with the MARS research team. Candidates at all levels of research experience are invited to apply. The MARS team contains experts in Physics, Mathematics, Engineering, and Radiology. They have built a spectroscopic x-ray scanner using CERN’s Medipix detector (www.cern.ch/medipix). The scanner is suitable for small animals and pathology specimens. Interns will work with the MARS team to collect, analyse and visualise spectroscopic computed tomography (CT) data.

The image on the left is a MARS scan of a mouse abdomen. The right is a traditional CT scan. The spectroscopic information in the MARS image provides more information allowing us to distinguish different materials within the mouse.

Programme:
- Undergraduate research project for academic credit, e.g. PHYS391 – Introduction to research in physics, 4-8 weeks commitment.
- Summer internships: 3-10 weeks. For people considering starting a Masters or PhD with the MARS team. Subjects include Medical Physics, Mathematics, Radiology, Electrical and Computer Engineering.
- All interns would participate in the HIT-Lab data visualization course – see attached.

Intern funding for a period of research between December 2008 and February 2009:
- Summer undergraduate research projects: Course fees paid.
- Summer studentship scholarships: $NZ400 per week (tax free) for a up to 10 weeks.
- International travel scholarships: Two scholarships of $NZ4000.

2009 MSc and PhD Scholarships: The MARS project has funds for two scholarships for students working on the MARS project at the University of Canterbury. All graduate interns are eligible to apply. Closing date: 5 January 2009.

Contact:
Professor Phil Butler
phil.butler@canterbury.ac.nz
Department of Physics and Astronomy
University of Canterbury