

**ABSTRACT  
PARALLEL WORKING SESSION**

**RESEARCH**

**Thomas Fogwill**

Technical leader: scubuntu  
Meraka Institute of the CSIR, South Africa

**scubuntu: a free and open desktop computing environment for  
researchers and scientists**

Scubuntu is a free, libre and open source software (FLOSS) project to develop a desktop operating system designed specifically for scientists. It is made available under a copyright license that permits users to use, improve and redistribute the source code as they see fit. The FLOSS benefits for developing countries include:

- user empowerment by breaking the dependence on expensive proprietary software, thus lowering technological barriers-to-entry and crossing the digital divide
- providing affordable access to high quality software
- ability to customise and localise to suit specific user needs
- stimulation of local technology industry

To empower research staff and realise these benefits, universities should consider adopting the FLOSS Linux operating system on the desktop. However, adopting Linux and finding appropriate scientific applications can be complex for many researchers, as it is a new and unfamiliar environment. To ease this process for researchers, the scubuntu project aims to develop an Ubuntu-based Linux distribution that caters specifically to their needs. It does so by providing high quality open source scientific software in a preconfigured, user-friendly environment that directly supports researchers' computing needs.

FLOSS promotes local innovation by lowering the technological barriers-to-entry for ICT entrepreneurs and empowering them to develop world-class expertise. The scubuntu project delivers these same benefits to the R&D community in universities. It does so by fostering global collaboration and allowing researchers in poorly-funded institutions and developing countries to compete on equal footing with those in the developed world. The project also supports human capital development through the building of strong user and developer communities, the development of advanced knowledge about FLOSS for scientific computing, and the development of advanced Linux and FLOSS development skills.