



International speaker on underwater observatory

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Setting up an underwater electronic 'observatory' that gathers and transmits information from hundreds of kilometres of ocean floor got more than a passing glimpse today.

International speaker Dr Benoit Pirenne joined Perth's senior data managers to talk about the success of Canada's most expensive sea floor project, an 800-kilometre cabled observatory known as NEPTUNE Canada.

As Associate Director of the \$125 million NEPTUNE project, which has taken six years to complete, he is putting the final touches on his work to make it one of the world's largest working scientific marine research data gathering facilities.

In its finished form it will distribute seabed and water column information via the internet to scientists, the general public, policy makers, educators and students.

Dr Pirenne said NEPTUNE information will be collected by 120 different instruments including cameras, water quality sensors, seismological equipment, acoustic arrays and automated wheeled vehicles placed at five locations of scientific interest.

"The information is fed down the cable line to an unmanned shore based station which sends it to a data centre 200 kilometres away," he said.

Dr Pirenne is in WA as the guest of Professor Peter Quinn, Director of WA's new International Centre for Radio Astronomy Research, a joint venture of The University of Western Australia and the Curtin University of Technology, and has made presentations to groups there.

Today's presentation was sponsored by WAMSI, iVEC and the Western Australian Satellite Technology and Applications Consortium (WASTAC). All are collecting a huge amount of electronic marine science data in WA.

"The same sort of information management infrastructure and networked underwater sensor networks, as currently being deployed in NEPTUNE, could be a model for the future," Dr Steve Blake, Chief Executive Officer of the Western Australian Marine Science Institution, said.

"We could build our own infrastructure using internet facilities, WASTAC's remotely sensed data from satellites and the high-performance computer and

data storage at iVEC to archive and provide access to the large amounts of marine and environmental data already being amassed.

“The radio astronomers are used to handling such large datasets, so we need to learn from them how to store and access the ever-increasing data volumes being produced.”

For more information contact Dr Benoit Pirenne or Professor Peter Quinn on 6488 4553 or 0414 185 052, Dr Steve Blake on 0409 183 277 or Sue McKenna on 0424 196 771. Dr Pirenne will be available for interview on 6 February.

A short video about the NEPTUNE project is available.

www.wamsi.org.au
www.astro.uwa.edu.au
www.wastac.wa.gov.au
www.ivec.org