International workshop. Cetacean echolocation and outer space neutrinos: ethology and physics for an interdisciplinary approach to underwater bioacoustics and astrophysical particles detection



Contribution ID: 68 Type: Invited Lecture

Expansion of the Ocean Networks Canada hydrophone network and linking with AIS monitoring

Saturday, 19 October 2013 09:20 (1h 10m)

Ocean Networks Canada operates major cabled undersea observatories in the northeast Pacific Ocean, and a cabled mini-observatory in the Arctic Ocean. These observatories support a variety of underwater instruments ranging from seismometers to chemical sensors and cameras. Access to all data collected on our networks is open to all researchers and free of charge. After experimenting with several types of hydrophones, we are now expanding our hydrophone network in both inshore and offshore waters. We have also initiated a program to link hydrophone data to vessel traffic information provided by Automatic Identification System (AIS) receivers, in inshore waters of British Columbia, and in the Arctic Ocean near Cambridge Bay, Nunavut. Our goal in linking AIS and hydrophone data in a single database is to permit documentation of underwater noise generated by different vessel types, and the study of cetacean responses to vessel traffic. This presentation will describe the distribution of our hydrophone network, operational challenges and recent research results.

Primary author: Prof. JUNIPER, Kim (Ocean Networks Canada, University of Victoria)

Co-authors: PIRENNE, Benoit; DEWEY, Richard (Ocean Networks Canada, University of Victoria); MCLEAN, Scott (Ocean Networks Canada, University of Victoria); DAKIN, Tom (Ocean Networks Canada, University of Victoria)

Presenter: Prof. JUNIPER, Kim (Ocean Networks Canada, University of Victoria)

Session Classification: Submarine Multidisciplinary Observatories