



## **Funded Masters opportunity in Arctic fish ecology**

Pelagic fish and zooplankton support top predators such as whales, seals and larger fish. Understanding their ecology is thus necessary to manage marine ecosystems. In the Western Canadian Arctic, the seasonal ice cover generally limits monitoring of pelagic organisms to ship-based surveys in the summer months. To increase our capacity to study seasonal changes, we deployed moored oceanographic instruments, including autonomous echosounders, which continuously monitor the water column over the annual cycle. We seek a highly motivated Masters student to work with these datasets and participate in a project on acoustic detection of fish and zooplankton in the Canadian Arctic. The successful candidate will:

- 1) Test if moored instruments provide similar results to hull-mounted echosounders;
- 2) Assess if acoustic moorings can provide reliable indices of fish abundance in the Canadian Beaufort Sea;
- 3) Document the main fish and zooplankton species in the region based on net samples.

This project will be supported and conducted in collaboration with Fisheries and Oceans Canada as part of the Canadian Beaufort Sea – Marine Ecosystem Assessment. The successful candidate will be registered in the Master's program in Fisheries Science and Technology offered at the Marine Institute of Memorial University of Newfoundland in St. John's, Canada

<https://www.mi.mun.ca/programsandcourses/programs/fisheriessciencefisheriesscienceandtechnology/masterofsciencedegree/>.

Interested candidates must meet the prerequisites for admission to the Marine Institute's Master's program and have a background in biology, physics, engineering or a related discipline from a recognized institution. Experience in fisheries acoustics, fish ecology, and geostatistics will be considered assets. To apply, please send a cover letter, curriculum vitae and copies of university transcripts by email to both Dr. Maxime Geoffroy [Maxime.Geoffroy@mi.mun.ca](mailto:Maxime.Geoffroy@mi.mun.ca) and Dr. Andrea Niemi [Andrea.Niemi@dfo-mpo.gc.ca](mailto:Andrea.Niemi@dfo-mpo.gc.ca) by 21 May, 2019.