What were the relative impacts of changing deglacial meltwater fluxes and changing ice sheet geometry on atmospheric and ocean circulation? How did sea-ice respond and in turn feedback on the rest of the climate system? What actually happens to a deglacial meltwater plume as it propagates past coastal fjords and through turbulent boundary currents? And how can we better represent these processes in coarse resolution GCMs? We are seeking a Post Doctoral Fellow (PDF) to investigate these questions as part of a large collaborative project.

The PDF will initially be based in the glacial dynamics group at MUN (Memorial University of Newfoundland, St. John's). He/she will have extended visits with ArcTrain-Canada (<u>www.arctrain.ca</u>) co-supervisors at the University of Alberta (Edmonton, high resolution ocean modelling) and the UQAM (Montreal, comparison of model output to paleo-oceanographic records).

Applications are invited from creative self-motivated candidates with a deep interest in Earth systems modelling/science. Applicants must have completed a PhD in physics, meteorology, physical oceanography, or closely related areas by the start of PDF. Applicants must also be interested in working in a collaborative environment on computationally intensive projects. Required qualifications:

- published record in ocean, atmosphere, and/or climate system modelling with GCMs (preferably the CESM)
- Solid understanding of geophysical fluid dynamics and atmospheric/ocean physics
- Detailed knowledge of data analysis methodologies for climate models
- Experience in using FORTRAN or C, and analysis packages such as OCTAVE/MATLAB or R
- Experience with Linux/Unix systems, including the writing of shell scripts

Term: 2 years Start date: January, 2015 (or soon thereafter...)

Computational resources are second to none: The Glacial Dynamics group at MUN has a dedicated 540 core cluster (to be upgraded to over 1000 cores in 2015) and access to further computational resources through ACEnet and SciNet.

Associated benefit: the spectacular natural environment of Newfoundland, Canada

Interested candidates should contact Lev Tarasov (lev@mun.ca). Please include a full CV, contact information for references, and a statement of interest.

Initial consideration will be given to applications received prior to Nov 30/14. Thereafter, applications will be reviewed on an as-needed basis.

Lev Tarasov - Dept of Physics and Physical Oceanography, Memorial University of Newfoundland. Email: lev@mun.ca <u>http://www.physics.mun.ca/~lev/</u> Tel (709)-864-2675 Fax (709)-864-8739