

## Physics and Physical Oceanography Seminar

### A framework for evaluation and characterization of drift in ocean models

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**DATE: Thursday, Oct 29, 2020**

**TIME: 3:30 pm**

**Place: Webex (link will be sent out)**

**ABSTRACT:** Coastal ocean models are commonly used to predict the trajectories of drifting objects for search and rescue and oil spill response applications. Surface currents in coastal areas can be notoriously difficult to model due to complex interactions between tides, winds and baroclinic effects. It is important to assess the accuracy of drift predictions in these models. This talk presents a framework for evaluating and characterizing drift in ocean models. This framework provides a systematic way to produce drift predictions with different ocean models, drift models, and wind models along with a common set of evaluation metrics. This framework is used to assess the impact of various choices in drift modelling such as the ocean model resolution, ocean model grid, ocean model output frequency and the choice of drift model itself. We apply this framework to Government of Canada ocean models developed under the Canadian Operational Network of Coupled Environmental Prediction Systems (CONCEPTS) and the Oceans Protection Plan (OPP) programs.

**ALL ARE WELCOME!**