

# Joint JIMAR/Oceanography Seminar

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### *" Surface drift and the search for MH370"*

The sea-floor search for Malaysia Airlines flight MH370 is soon to be suspended, with no sign of the plane having been found in the area suggested by careful analysis of the Inmarsat transmissions. In an attempt to shed further light on the location of the plane, we completed a 3 step project for the Australian Transport Safety Bureau, who are conducting the search: 1) check that our global ocean model is able to reproduce the long-term drift of undrogued SVP drifters, 2) determine, by fieldwork using full-size replicas, whether found parts of the plane drift faster or slower downwind than undrogued drifters, and 3) do model simulations of the trajectories of all plane parts and assess the most likely location of the crash, taking into account all available information on where debris has been found, and not found, on shores and during the initial 6-week aerial search off Australia. Issues confronted during this work include windage, near-surface shear, Stokes Drift as well as the effect of wave forces on irregular-shaped items. The result of this work was to advise the ATSB to shift the search slightly north, which has now (Jan 2017) occurred.

**Thursday March 2<sup>nd</sup>, 2017 3:00 p.m. MSB 100**