

Equatorial wave-current interactions

Abstract

The aim of this interdisciplinary project is a study of the interplay of surface waves, internal waves and the underlying currents in the equatorial Pacific. The project bridges mathematical, physical and engineering aspects. The theoretical investigation, welding mathematical analysis and modelling and supported by numerical simulations, will be performed at the University of Vienna, with the field data provided by the international partner at Stanford University.

Scientific disciplines:

101020 - Technical mathematics (75%) | 105102 - General geophysics (15%) | 105205 - Climate change (10%)

Keywords:

Ocean waves, currents, climate change

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Collaborators: Stephen Monismith (Stanford University) (Co-Principal

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Status: Completed (15.04.2017 - 14.04.2021) 48 months Funding volume: EUR 434,200

Further links about the involved persons and regarding the project you can find at https://archiv.wwtf.at/programmes/mathematics/MA16-009