## Abstract Submitted for the DFD10 Meeting of The American Physical Society

Internal tide scattering (and generation) by arbitrary two-dimensional topography in arbitrary stratifications<sup>1</sup> THOMAS PEACOCK, MANIKANDAN MATHUR, MIT, GLENN CARTER, University of Hawaii — The generation and scattering of internal tides plays an important role in the energetics of the ocean. We have advanced the analytical Green function method to handle generation and scattering of internal tides by arbitrary two-dimensional topography in arbitrary stratifications. This provides a very useful tool for both fundamental studies of internal tide processes and for making reasonable predictions at important geophysical locations, such as the Hawaiian Ridge. Here, we give an overview of the method and present some fundamental and geophysical results obtained using it.

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