

FOREWORD

The 14th `Aha Huliko`a Hawaiian Winter Workshop was held from January 25 to 28, 2005, in Honolulu, Hawaii. Its topic was “*Rogue Waves*.”

Rogue waves are extreme ocean waves. They fascinate the public and are part of mariners’ lore. The practical importance of rogue waves is clear: they affect naval and civilian shipping and can damage offshore platforms and coastal structures. It is much less clear how often and when and where they occur, how they come about, and whether their occurrence is predictable. The workshop addressed these important and challenging questions. It focused especially on

- (1) Remote (radar) and in-situ measurements,
- (2) Statistics of their occurrence,
- (3) Possible nonlinear dynamical causes of their occurrence,
- (4) The role of wave breaking and the wind,
- (5) The effect on the underlying ocean and on coastal and offshore structures, and
- (6) Prospects of operational forecasting.

The lectures of the workshop are published in these proceedings. The order of the papers loosely follows the agenda of the workshop, covering observations, theoretical analyses, and numerical modeling results. Also included is a summary of the workshop.

The workshop was supported by the Office of Naval Research grant number N00014-00-1-0168. It was hosted by the Department of Oceanography, School of Ocean and Earth Science and Technology, University of Hawaii. The excellent facilities and the capable staff of the Imin Conference Center contributed greatly to the success of the meeting. The local organization and logistical arrangements were expertly handled by Ms. Sharon Sakamoto. This proceedings volume came into existence through the creative and dedicated research of the scientists who gathered in Hawaii and provided the articles that follow.

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† `Aha Huliko`a is a Hawaiian phrase meaning an assembly that seeks into the depth of a matter.