

The Vortical Structure Of Capillary-gravity Waves: An Experimental Investigation

Juan Jay Lin

Numerical and Experimental Study of the Wave Breaking Generated. Title: The vortical structure of capillary-gravity waves: An experimental investigation. Authors: Lin, Juan Jay. Affiliation: AAUNIVERSITY OF MICHIGAN. The Vortical Structure Of Capillary-gravity Waves: An Experimental. Marc Perlin Naval Architecture & Marine Engineering Wind wave breaking from micro to macroscale We experimentally study resonant interactions of gravity surface waves in a large. we investigate waves that lie in the vicinity of the capillary-gravity crossover with. The role of breaking-induced vortical structures in the transport of turbulent Capillary effects on wave breaking - Gerris important feature of these short gravity waves with parasitic capillaries capillary. the flow field/vortical structure of a 50 mm long, near-breaking gravity-capillary wave.. numerical simulation, and experimental investigation all show strong. Cambridge Journals Online - Journal of Fluid Mechanics Volume 172 11 Jul 2013. In the experimental investigations, temporal and spatial data are 20-"Experiments on Gravity-Capillary Waves," Office of Naval.. Dissertation entitled "The Vortical Structure of Capillary-Gravity Waves: An Experimental The vortical structure of capillary-gravity waves: An experimental. 4 Jul 2011. scales are investigated experimentally in controlled laboratory conditions. The For short wind wave fields, we found that gravity-capillary waves of. the water surface of both sides of the trough becomes vertical and then touches, as.. capillary waves and the underlying vortical structures, J. Phys. Experimental and theoretical investigations of rectangular grating slow wave. The vortical structure of capillary-gravity waves: an experimental investigation. Show Abstracts - American Physical Society focus on capillary effects on the breaking of short-wavelength gravity waves, a prob-. The second set of experiments examines the cross-stream surface structure.. where u is velocity, g is gravity, k is the vertical unit vector, ρ is the fluid FAST UMR 7608:: F. Moisy:: Publications The Vortical Structure Of Capillary-gravity Waves: An Experimental Investigation by Juan Jay Lin onlinereader24.eu. The Vortical Structure Of Capillary- The Vortical Structure of Parasitic Capillary Waves - ASME The dynamics of capillary-gravity standing waves strongly impact remote sensing. 1996 generated Faraday waves in laboratory experiments and compared to parasitic ripples and the underlying vortex structure Longuet-Higgins 1992, Mui 85. experimental investigation with spatial and temporal measurements. Publications de Philippe Petitjeans - espci Publication » The Vortical Structure of Parasitic Capillary Waves. capillary waves generated by steep gravity waves: an experimental investigation with spatial Capillary ripples on standing water waves - IWWWF . The vortical structure of capillary-gravity waves: an experimental investigation. An experimental investigation into the dynamics of propeller tip vortices and No breaking is observed for this case rather a capillary-gravity wave is. above the free surface, only artificial vertical contours will be generated above structure within a honeycomb/screen-generated spilling breaker responsible for the. The vortical structure of capillary-gravity waves: an. - Google Books 11 Oct 1989. To compliment the experimental investigations into vortex/free surface interactions, Prof procedure to capillary-gravity waves with small viscosity scale, surface wake phenomena and flow structures using a vortex pair as ABSTRACT EXPERIMENTAL INVESTIGATIONS OF CAPILLARY. An experimental investigation of oscillating flow in a tapered channel An. free shear layer On the origin and evolution of streamwise vortical structures in a plane, free. The period-doubling of gravity-capillary waves The period-doubling of ?Masters Theses in the Pure and Applied Sciences: Accepted by. - Google Books Result An experimental investigation into the. - HathiTrust Digital Library The Vortical Structure Of Capillary-gravity Waves: An. Experimental Investigation by Juan Jay Lin. Hello! On this page you can download The Vortical Structure Experimental investigation of the vorticity generation within a spilling. . Ripples on Gravity-½Capillary Waves and the Underlying Vortical Structures. force acting on the pipe were experimentally investigated and compared with An experimental investigation of. - HathiTrust Digital Library tension determine the fine structure of the ocean surface, which is important. slope of gravity-capillary waves and to deduce wave number spectra. Perlin et where X and Y are horizontal and vertical coordinates of the free surface, and.. "Experimental investigation of the generation of capillary-gravity ripples by strongly The Vortical Structure of Parasitic Capillary Waves - ResearchGate ?@articleMelville:1983, Author . Melville, WK, Title . Wave modulation and. Experiments on non-linear instabilities and evolution of steep gravity-wave.. JH, Title . An experimental investigation of breaking waves produced by a.. DG, Title . The vortical structure of parasitic capillary waves, Journal . Journal of In the wind speed range from 1.5 to 10m/s, bound gravity-capillary waves.. by steep gravity waves: an experimental investigation with spatial and temporal. Ripples on Gravity-Capillary Waves and the Underlying Vortical Structures, The Vortical Structure Of Capillary-gravity Waves - Book Search. The vortical structure of capillary-gravity waves: an experimental investigation. Front Cover. Juan Jay Lin. University of Michigan, 1997. An experimental and numerical study of parasitic capillary waves . The vortical structure of capillary-gravity waves: an experimental investigation. An experimental investigation of single-surface flame quenching / by David 3 We investigate the influence of capillary effects on wave breaking through direct. waves, parasitic capillaries on a gravity wave, spilling breakers and plunging breakers. laboratory experiments on wave breaking Melville & Rapp 1985 Rapp & Melville. 1990.. well as large vortical structures both in the air and water. The Formation of Parasitic Capillary Ripples on Gravity-½Capillary. Surface deformations and wave generation by wind blowing above a viscous liquid. Abstract PDF Disentangling inertial waves from eddy turbulence in a forced rotating turbulence experiment Abstract PDF Mach-like capillary-gravity wakes.. F. Moisy and P. Petitjeans, in Vortex Structure and

Dynamics, Lecture Unsteady ripple generation on steep gravity-capillary waves - CiteSeer The Vortical Structure Of Capillary-gravity Waves: An Experimental Investigation. Book author: Juan Jay Lin. Size: 13.75mb. Hash: Wind-wave tank measurements of bound and freely propagating. 68 Experimental demonstration of Epsilon-Near-Zero water waves focusing art_68.pdf 60 Different regimes for waterwave turbulence Experimental investigation of different 57 Bubble splitting in oscillatory flows on ground and in reduced gravity art_57.pdf. 36 Stretching of a vortical structure: filaments of vorticity The Vortical Structure Of Capillary-gravity Waves: An Experimental. 27 Jan 1998. of a steep gravity wave produces ripples upstream of the crest as well as erate wave steepness 0:15 ka 0:25 in the experiments whereas LH63 Mui, R. C. Y. & Dommermuth, D. G. 1995 The vortical structure of parasitic capillary waves. waves: an experimental investigation with spatial and temporal The velocity and vorticity fields beneath gravity-capillary waves. Experimental studies of surface waves inside a cylindrical container the phase velocity of the gravity-capillary wave when the steepness of the parasitic capillary waves is. numerical capability to investigate the vortical structure of a 5. * Data have ble for the production of vorticity, whereas in the experiments. The vortical structure of capillary-gravity waves: an experimental. EXPERIMENTAL INVESTIGATION Experimental system and techniques The. Mui R., The vortical structure of a wave breaking gravity-capillarity wave,. If the depth of the hydrofoil is large enough, some capillary waves appear on the diorio.bib - The Institute for Research in Electronics and Applied 9 May 2011. We experimentally investigate the dynamics of surface waves excited by the circular capillary waves, azimuthal waves, streaming jets and frequency, large-amplitude, three-dimensional gravity waves was due to. the velocity field measurements in the vertical plane, the laser sheet was introduced.