SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY

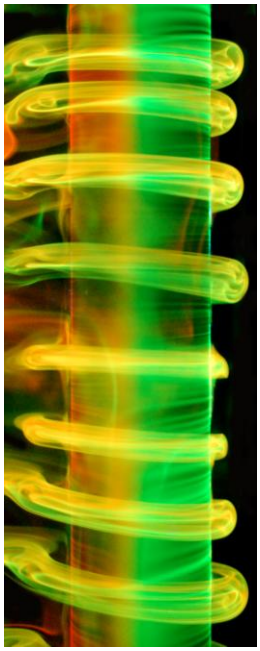
Press Release

FOR IMMEDIATE RELEASE

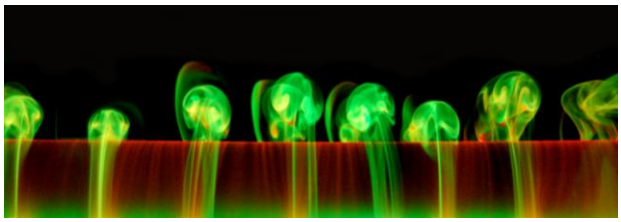
SOEST Media Contact: Tara Hicks Johnson
808-956-3151, hickst@hawaii.edu

Miguel Canals and Geno Pawlak win American Physical Society fluid mechanics competition

Honolulu, HI – Ocean and Resources Engineering (ORE) graduate student Miguel Canals and ORE Associate Professor Geno Pawlak's poster on instabilities in oscillating flow was one of the winning entries in the American Physical Society 'Gallery of Fluid Motion' poster competition. These will be published in a special edition of Physics of Fluids journal in 2008.



Their entry, entitled "Instability, transition and vortex topology in oscillating flows" shows the flow patterns that develop when a cylinder is exposed to an oscillating flow, as would be the case for a cylinder in the ocean when exposed to waves. "Understanding the dynamics of these coherent vortical features is important to correctly predict the pressure distribution on cylindrical structures," explains Canals, "an important problem in ocean engineering."



The toroidal features that can be seen in the pictures are due to the so-called "centrifugal instability".

Canals' advisor, Geno Pawlak adds "Miguel's research focuses on vortex dynamics in oscillating flow past rough boundaries. His experiments are examining instabilities in flow across the curved surface of the cylinder which represents an idealized roughness element." The research is funded by the National Science Foundation.

Posters are selected in November each year by a panel of distinguished international referees for artistic content, scientific merit, originality and ability to convey information.

Congratulations, Miguel and Geno!

For Interviews contact:

Miguel Canals, Graduate Assistant, PhD Candidate, Department of Ocean and Resources Engineering, School of Ocean and Earth Science and Technology, University of Hawaii, Email: mcanals@hawaii.edu, (808) 956-7999

Geno Pawlak, Associate Professor, Department of Ocean and Resources Engineering, Director, Kilo Nalu Observatory, School of Ocean and Earth Science and Technology, pawlak@hawaii.edu, 808-956-8100

For more information about the contest please see http://www.dfd2007.eng.utah.edu/gallery.htm