

Gallery of fluid motion: Evocative images and animations bring the science of fluid dynamics to life

November 17 2011



Direct numerical simulation of stratified turbulence. Lighter colors correspond to denser fluid. Image: Georgios Matheou and Daniel Chung

The beauty of science often is contained in elegant formulas or compelling data. For the study of fluid dynamics, fortunately, that beauty also is manifest in enticing images and animations of interesting phenomena. These images and animations also provide important scientific insights into the complex flow of materials under a wide variety of conditions.

Every year, the American Physical Society's (APS) Division of [Fluid Dynamics](#) (DFD) hosts posters and videos that show stunning [images](#), graphics, and animations from either computational or experimental studies of flow phenomena. The most outstanding entries are selected by a panel of [referees](#) for artistic content and honored for their originality and ability to convey information. To further highlight this important work and to draw attention to the breadth and impact of fluid dynamics research, a subset of these images and videos has been made available for viewing prior to the judging process.

This preview gallery is part of the APS/DFD Virtual Press Room, which highlights research to be presented at the 64th APS Division of Fluid Dynamics Annual Meeting, held from November 20-22, 2011, in Baltimore, Md. These images were selected for their evocative qualities, artistic merit, and ability to represent complex physics concepts in an approachable manner.

Images include simulations of roiling colors in a turbulent environment, the bouncing of balls in puddles, the darting tongue of a [hummingbird](#), and the careful trapping of a single red blood cell. Animations include the complex freezing of a droplet of water, the flight of a water-lily beetle, and the elegant motion of two entangled water jets.

More information: The complete galleries can be viewed here:

www.aps.org/units/dfd/pressroom/gallery/index.cfm

www.aps.org/units/dfd/pressroom/videos/index.cfm

Provided by American Institute of Physics

Citation: Gallery of fluid motion: Evocative images and animations bring the science of fluid

dynamics to life (2011, November 17) retrieved 24 April 2024 from
<https://phys.org/news/2011-11-gallery-fluid-motion-evocative-images.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.