The Beauty of Flow Visualization



Diverge/Converge: A Tesla coil creates plasma that arcs through air. *Mark Reusser, Larissa Rhodes, William Murray and Brian Hancz*

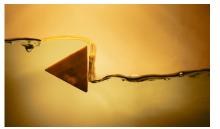


Opal Essence: Dry ice placed underwater forms bubbles of CO2 filled with water fog. The bubbles are illuminated by a flash. The room lights made the red smear while the shutter was open. *Amanda Barnes, Sean*

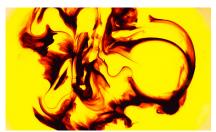
Hulings, Mu Hong Lin, Vanessa Ready and Brian Roche



Catenary on a Cold Steel Rod: Water droplets hang from a cylinder, held by surface tension. The droplets, formed by gravity and surface tension, are almost catenary shapes, acting as lenses. *Amanda Barnes*



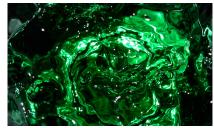
Flow Over: A surge of water pours over an obstacle during the filling of a water channel. *Kaite McNally, Shane Fagan, Megan Firestone and Eli Luke*



Flow Orange: Ultra dish soap poured over food dye on a plate. *Megan Firestone*



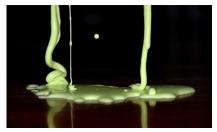
Flying Flames: A spray of WD-40 is ignited by a candle, barely visible in the center. *Jake Dembeck*, *Robert Irmiger*, *David Levine*, *John Miller and Brittany Moore*



Burbling: Dyed water, excited by a loudspeaker from below. *Jake Dembeck and David Levine*



Oil Fingering: Looking down on a thin layer of oil sandwiched between sheets of plastic, air was pulled into oil as the top sheet of plastic was lifted. *Erik Hansen, Phil Bollam, Justin Cohee, Barry Whittaker and Hsin-Jui Wu*



Oobleck: Pouring a cornstarch/water mixture shows non-Newtonian behavior, as the faster moving fluid is 'stiffer' than the slower, pooled mixture. *Robert Irmiger*



Water Talks: Droplet splashes rebound into Worthington jets. Chris Bonilha

Exhibiting:

Fiske Planetarium: August 28-Oct. 18th ATLAS Institute: October 26-Nov. 30th *Visit:* www.colorado.edu/MCEN/flowvis/

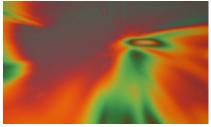


Worlds Colliding: A layer of rubbing alcohol burns on top of vegetable oil, on top of dyed boiling water in a pot on a stove. *James Kostrzewa*

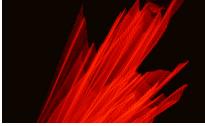
Solid in Gas in Liquid: A fire extinguisher set off underwater creates a three phase (solid, liquid, gas) flow. Rising bubbles of the propellant are filled with clouds of powder. *Matthew Blessinger*, *Dung Dinh Luu, Kevin*



McCoy and Joseph VanAmberg



Spin...Color: Colors caused by interference of light waves show thickness variations in a thin layer spin-coated onto a silicon wafer. The center of the spin is near the middle of the image. *Mu-Hong Lin*



Interstices: Time exposure of colored wavy strings moving in the air turbulence created by a box fan. *Derek Paul*



Smoke Curls: Rising smoke curls under a spoon. *Kaite McNally*



Curated by Professor Jean Hertzberg, Department of Mechanical Engineering, CU-Boulder; co-curated by Carla Selby of Tesseract Productions



