

Title: Mesoscopic Manifold

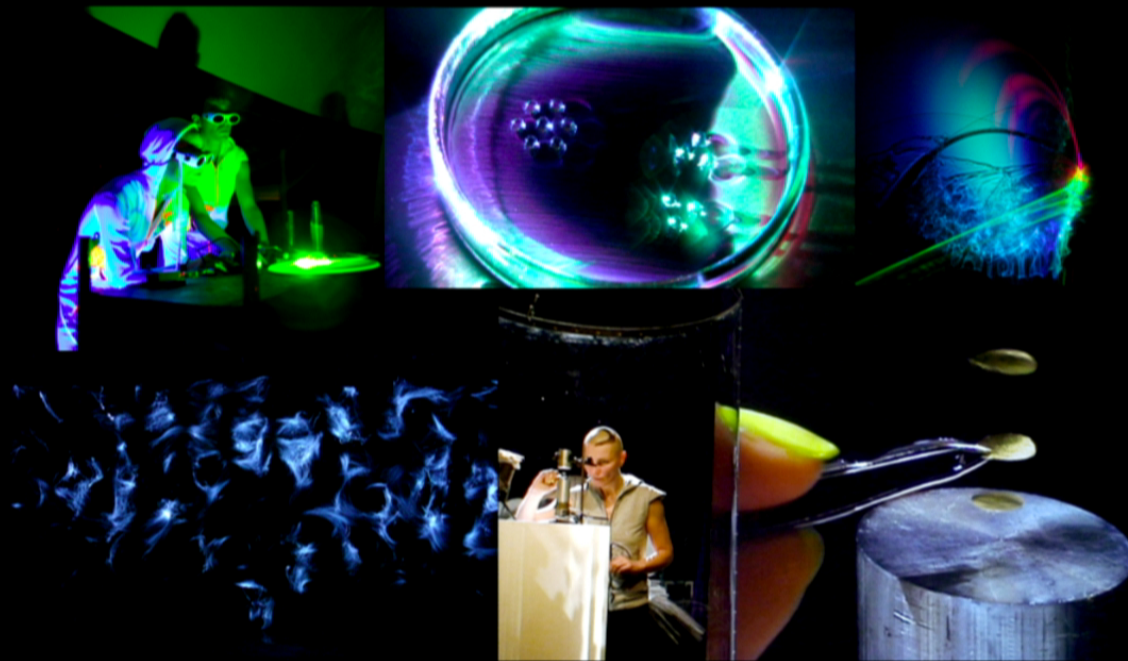
Date: Oct 14, 2011 06:15 PM

URL: <http://pirsa.org/11100108>

Abstract:

MESOSCOPIC MANIFOLD

EVELINA DOMNITCH DMITRY GELFAND



CAMERA LUCIDA: SONOCHEMICAL OBSERVATORY
a performative exploration of sonoluminescence

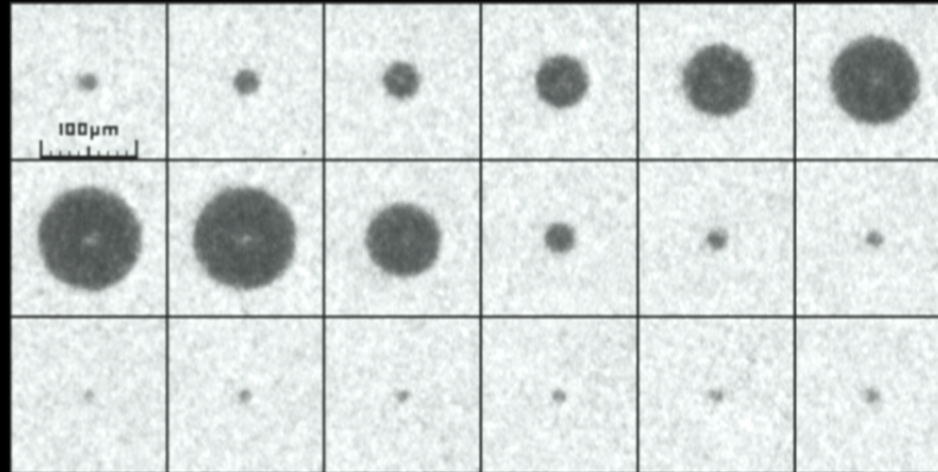


CAMERA LUCIDA: SONOCHEMICAL OBSERVATORY
a performative exploration of sonoluminescence



CAMERA LUCIDA: SONOCHEMICAL OBSERVATORY

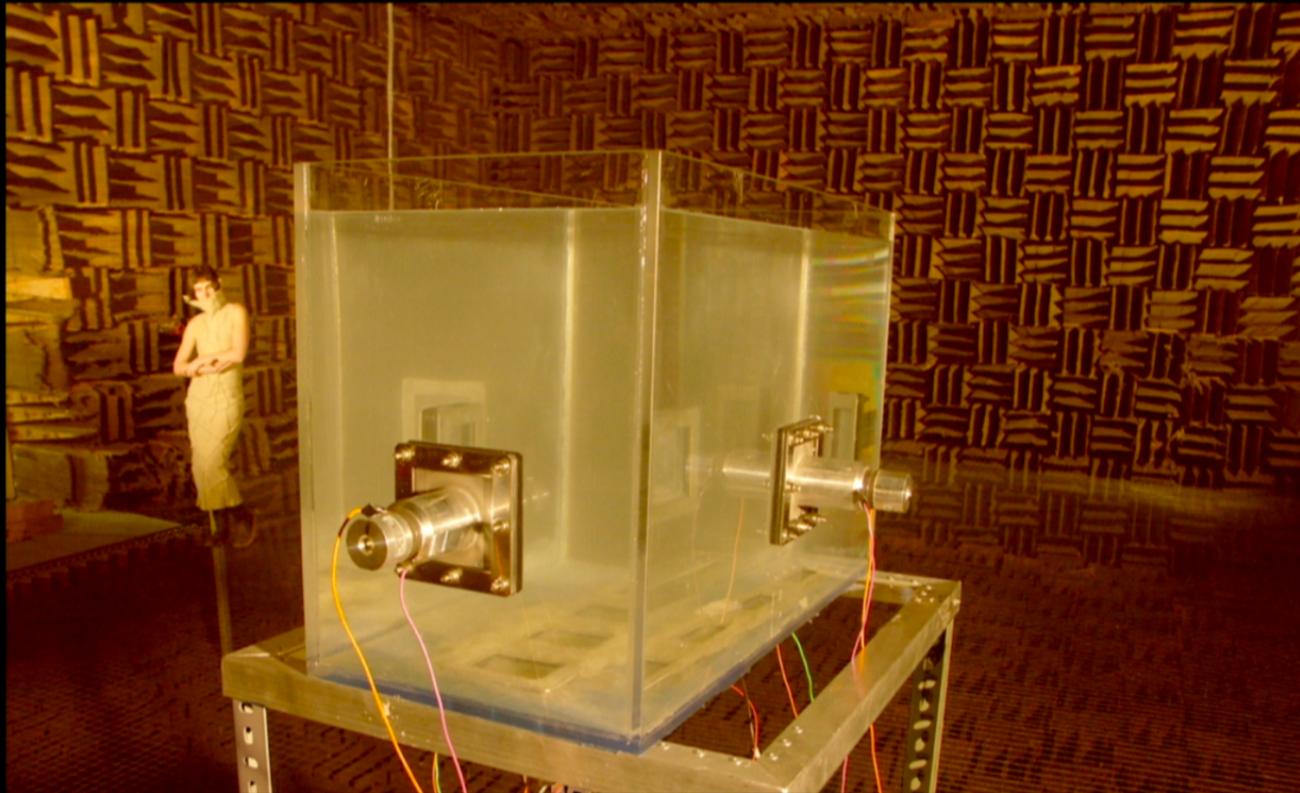
a performative exploration of sonoluminescence



Photographic series of a trapped sonoluminescing bubble driven at 21.4 kHz. (Photo © Reinhard Geisler) The bubble dynamics are represented at an interframe time of approximately 2.5 microseconds.

CAMERA LUCIDA: SONOCHEMICAL OBSERVATORY

a performative exploration of sonoluminescence



CAMERA LUCIDA: SONOCHEMICAL OBSERVATORY
a performative exploration of sonoluminescence

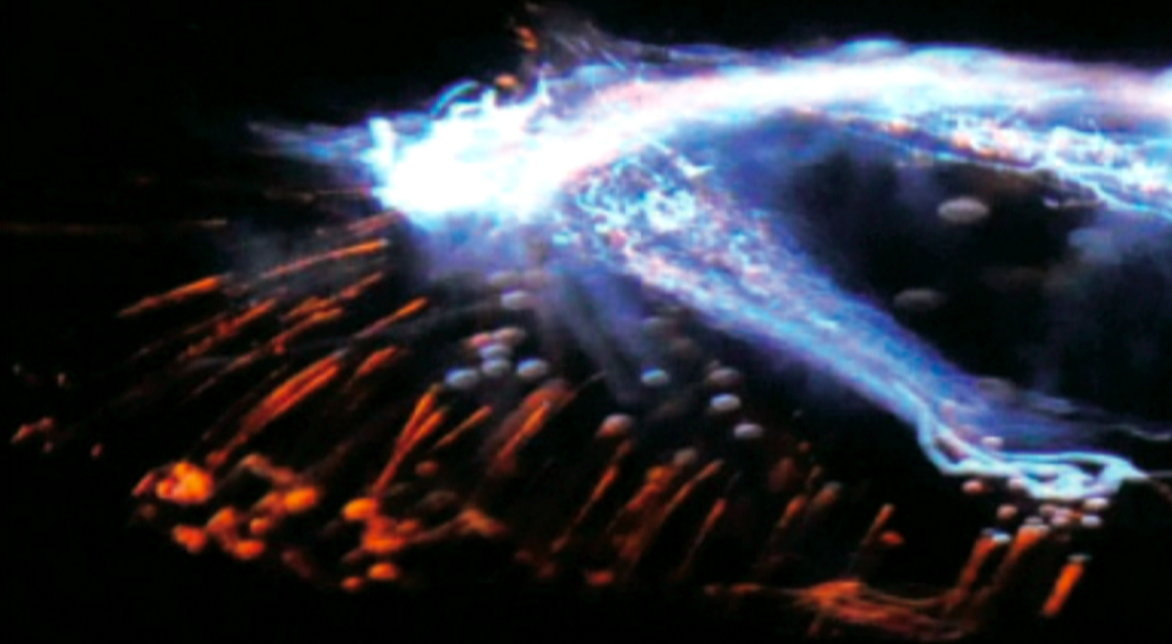


CAMERA LUCIDA: SONOCHEMICAL OBSERVATORY

a performative exploration of sonoluminescence



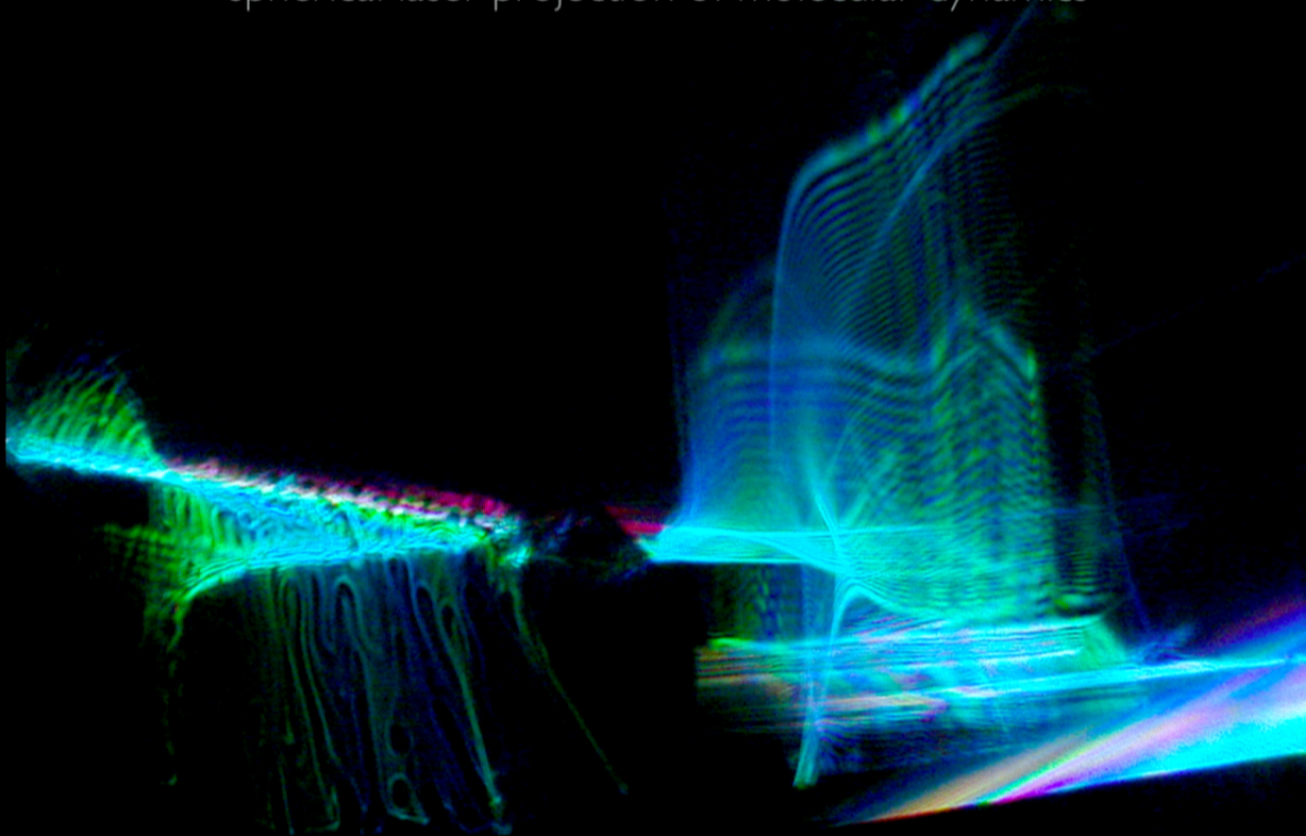
recently discovered two-colored sonoluminescence



courtesy of Shin-ichi Hatanaka, copyright 2010, The Japan Society of Applied Physics

10000 PEACOCK FEATHERS IN FOAMING ACID

spherical laser projection of molecular dynamics



10000 PEACOCK FEATHERS IN FOAMING ACID

spherical laser projection of molecular dynamics



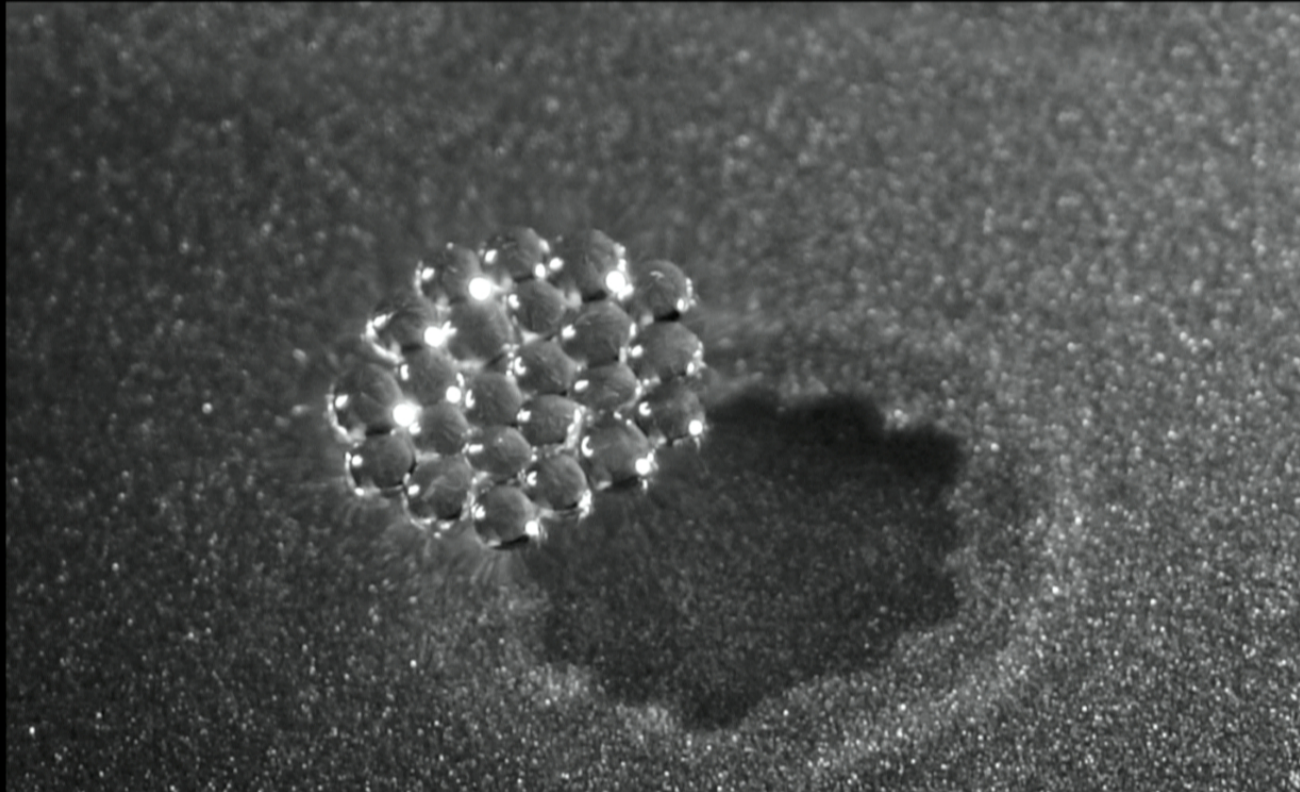
10000 PEACOCK FEATHERS IN FOAMING ACID

spherical laser projection of molecular dynamics



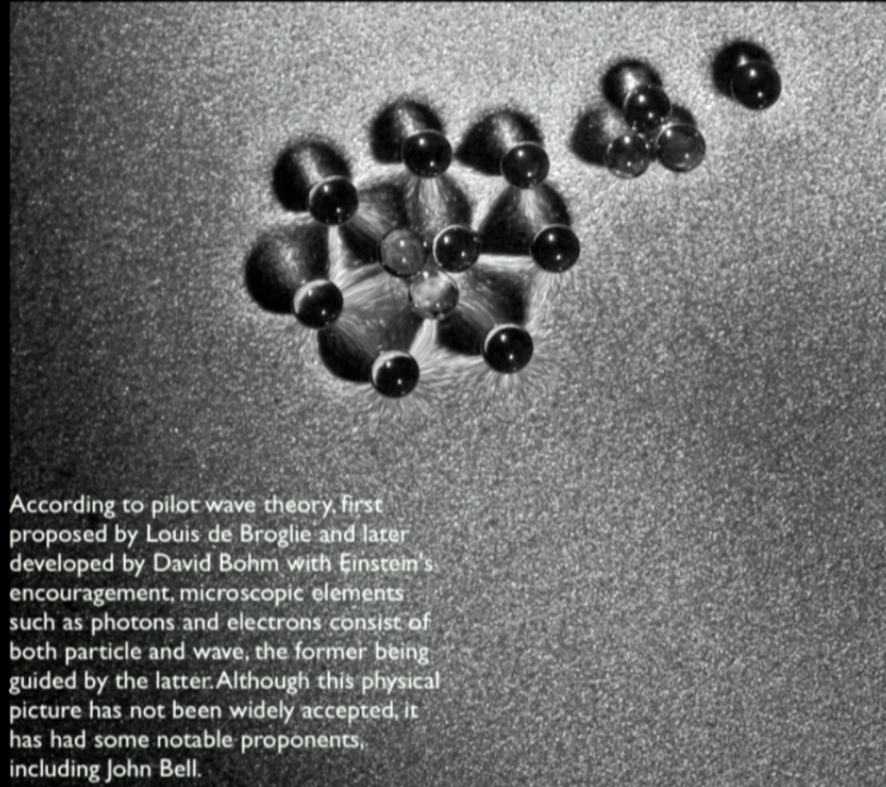
MUCILAGINOUS OMNIVERSE

acoustically levitated droplets reveal wave-particle duality



MUCILAGINOUS OMNIVERSE

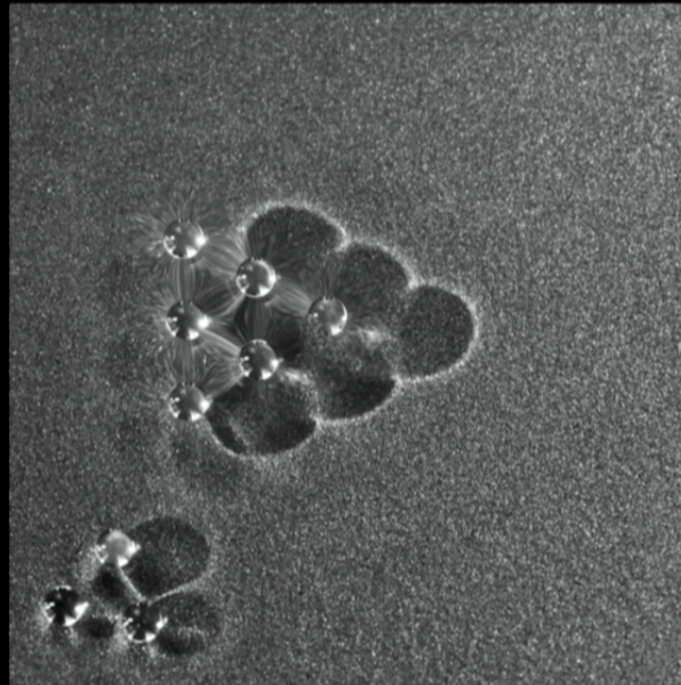
acoustically levitated droplets reveal wave-particle duality



According to pilot wave theory, first proposed by Louis de Broglie and later developed by David Bohm with Einstein's encouragement, microscopic elements such as photons and electrons consist of both particle and wave, the former being guided by the latter. Although this physical picture has not been widely accepted, it has had some notable proponents, including John Bell.

MUCILAGINOUS OMNIVERSE

acoustically levitated droplets reveal wave-particle duality



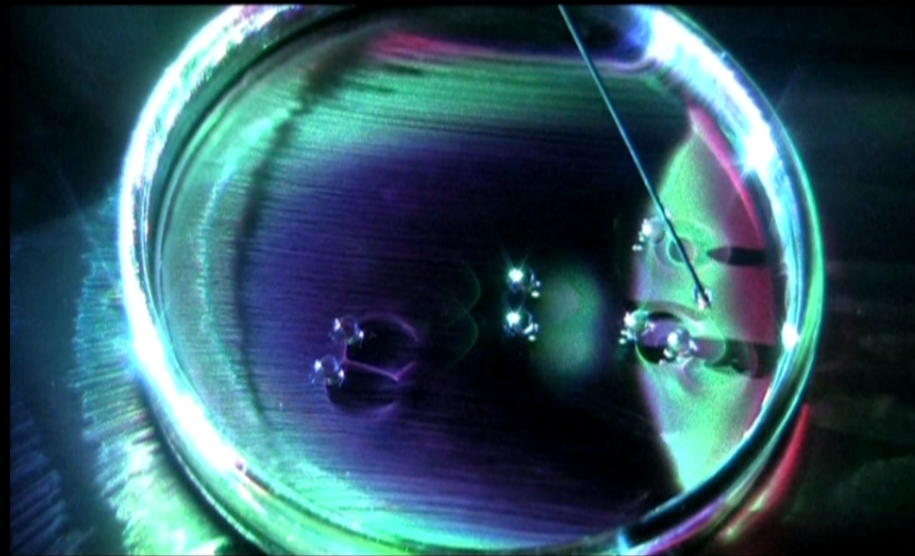
MUCILAGINOUS OMNIVERSE

acoustically levitated droplets reveal wave-particle duality



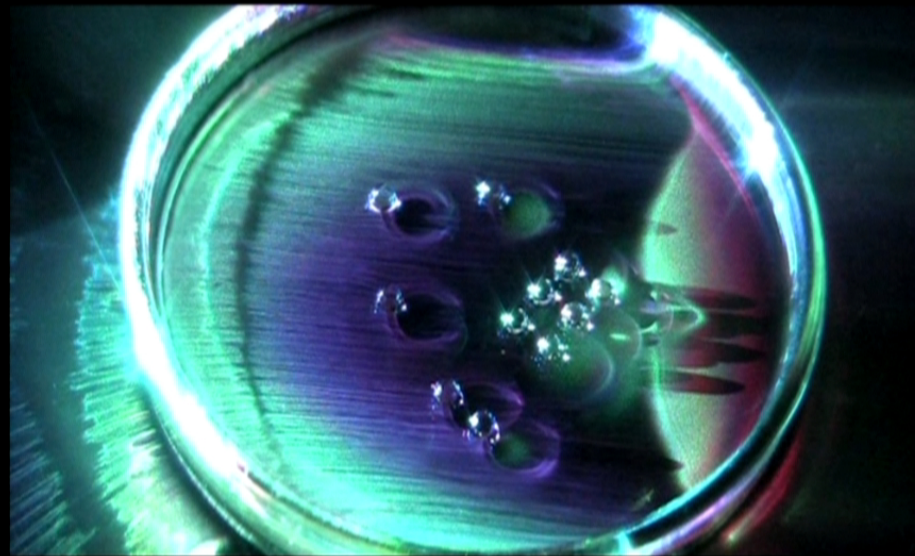
MUCILAGINOUS OMNIVERSE

acoustically levitated droplets reveal wave-particle duality



MUCILAGINOUS OMNIVERSE

acoustically levitated droplets reveal wave-particle duality



SONOLEVITATION
the pursuit of weightlessness

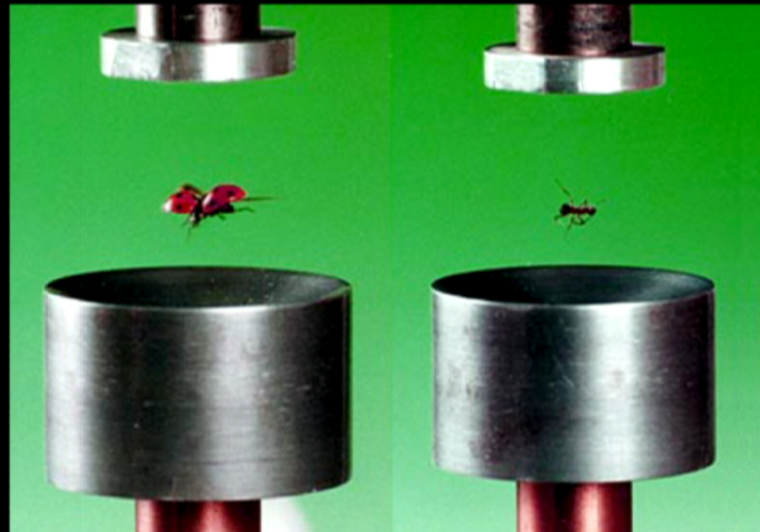


SONOLEVITATION the pursuit of weightlessness



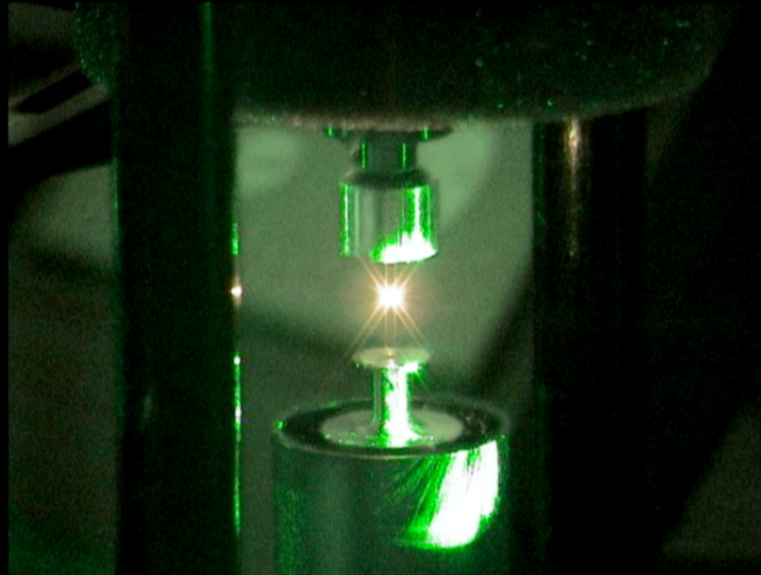
SONOLEVITATION

the pursuit of weightlessness



SONOLEVITATION

the pursuit of weightlessness



Photograph of a lasing levitated micro-droplet
from "*Levitated droplet dye laser*" H. Azzouz, L. Alkhafadji, S. Balslev, J. Johansson, N.A. Mortensen, S. Nilsson, and A. Kristensen

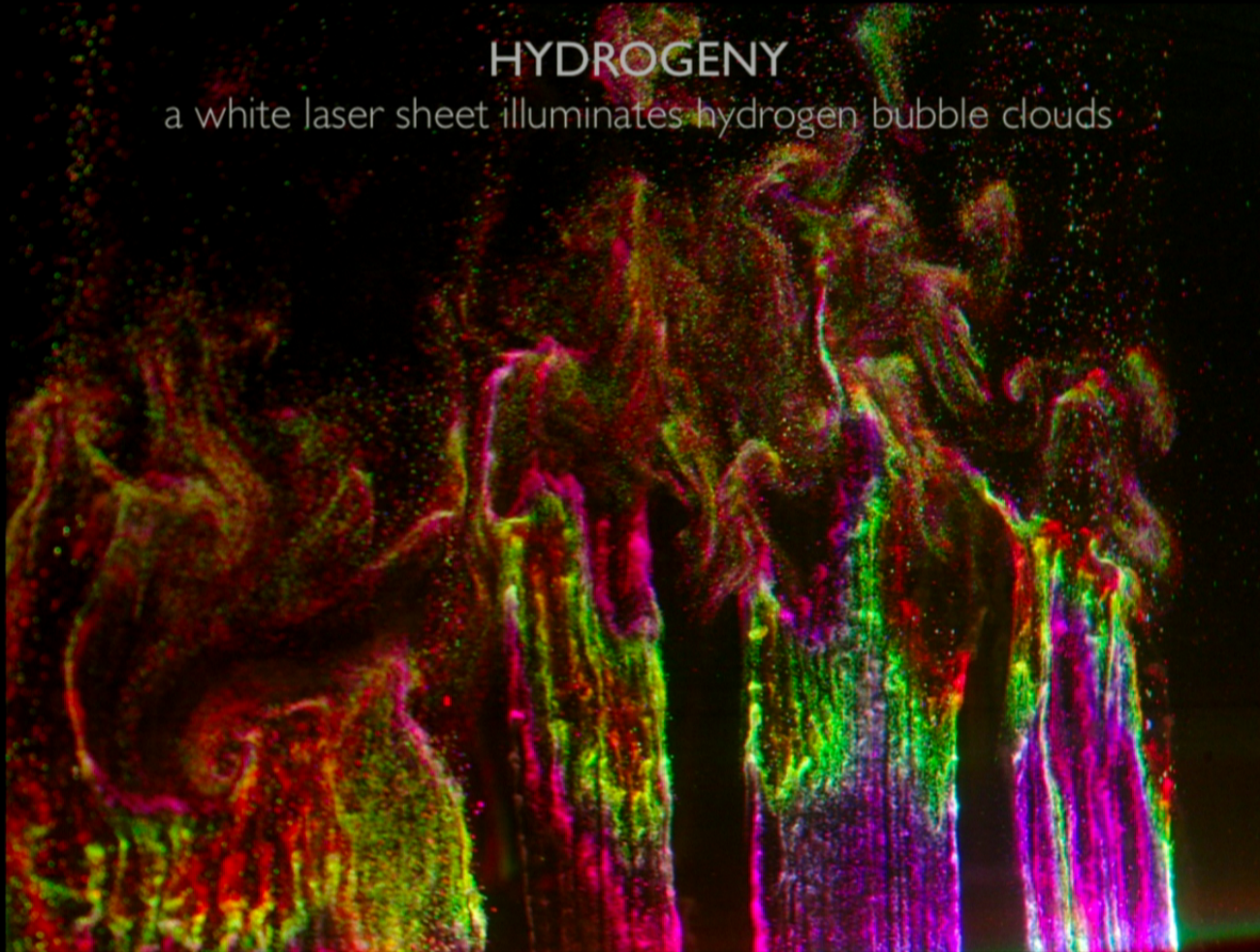
HYDROGENY

a white laser sheet illuminates hydrogen bubble clouds



HYDROGENY

a white laser sheet illuminates hydrogen bubble clouds



HYDROGENY

a white laser sheet illuminates hydrogen bubble clouds

