



A Division of the American Physical Society



Denver, CO November 19-21, 2017

The 70th Annual Meeting of the American Physical Society's Division of Fluid Dynamics (DFD) will be held in Denver, CO on November 19-21, 2017. The meeting is being hosted by the University of Colorado, Boulder with support from the University of Colorado, Colorado Springs; Colorado State University; and Colorado School of Mines.

Hotel Accommodations

Detailed Hotel information is available through the meeting web site:

<http://www.apsdfd2017.org>

Please make your reservation at one of the hotels listed below. Staying at one of these hotels helps meet DFD's financial obligation, and in turn helps to keep registration fees as low as possible. All hotels are a short walking distance to the Colorado Convention Center and

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The articles in this issue represent the views of the Division of Fluid Dynamics (DFD) publication committee and are not necessarily those of individual DFD members or the APS.

Meeting Venue

Located in the heart of Downtown Denver, the Colorado Convention Center is located in one of the most walkable and visitor-friendly downtowns in the country. There are 200 named peaks visible from Denver, including 32 that soar to 13,000 feet (4,000 meters) and above. The mountain panorama visible from Denver is 140 miles (225 km) long. Within a mile radius, downtown Denver has three major sports stadiums, the nation's second-largest performing arts center, three colleges with 30,000 students, an assortment of art and history museums, a mint that produces 10 billion coins a year, a river offering white water rafting, and over 300 restaurants.



Denver Skyline

2016 APS/DFD Gallery of Fluid Motion Award (Poster)

P0044: Accelerated condensation in an ultrasonic field
Thomas Boziuk, Marc Smith, Ari Glezer (Georgia Institute of Technology)

P0009: Computational simulation of liquid jet atomization

Dorin Jarrahbashi (Georgia Institute of Technology) William Sirignano, Pavel Popov, (University of California, Irvine) Fazle Hussain (Texas Tech University)

P0012: Large-eddy simulation of stratocumulus cloud

Georgios Matheou (California Institute of Technology), Daniel Chung (University of Melbourne), Joao Teixeira (California Institute of Technology)

2016 APS/DFD Milton van Dyke Award (Video)**V0076: Sweeping jet from a cross flow**

Florian Ostermann, Philipp Godbersen, Rene Wosidlo, C. Navid Nayeri, C. Oliver Paschereit (Technische Universität Berlin)

V0095: The shear joy of watching paint dry

Randy Hurd, Nathan Speirs (Utah State University) Jesse Belden (Naval Undersea Warfare Center) Zhao Pan, Ben Lovett, Wesley Robinson (Utah State University) Madison Boyer (Brigham Young University) Saberul Sharker, Mohammad Mansoor, Tadd Truscott, Andrew Merritt (Utah State University)

V0055: Eat, prey, swim: Dynamic vortex arrays created by a starfish larvae

William Gilpin, Vivek N. Prakash, Manu Prakash (Stanford University)

2016 APS/DFD Gallery of Fluid Motion Award (Video)**V0092: Before the bubble ruptures**

Li Shen, Fabian Denner (Imperial College London) Neal Morgan (Shell Solutions UK), Berend van Wachem, Daniele Dini (Imperial College London)

V0038: Fall and fragmentation of liquid metal in a viscous fluid

Jean-Baptiste Wacheul, Michaël Le Bars (Aix-Marseille Univ and ECM)

V0046: Flight of a falling maple seed

Injae Lee, Haecheon Choi (Seoul National University)

Student Poster Competition Award Winners

The Student Poster Competition is an opportunity for undergraduate and graduate students to refine their presentation skills and network. Awards were presented for 1st and 2nd place in three categories. Congratulations to the following:

Category 1: Computations

1st place: KP1.00077: Numerical analysis of the inertial migration of a spherical particle in circular tube flows — Takuya Yabu, Tomoaki Itano, Masako Sugihara-Seki — Kansai University

2nd place: KP1.00081: A nonlinear dynamical system for combustion instability in a pulse model combustor — Kazushi Takagi and Hiroshi Gotoda — Tokyo University of Science

Category 2: Experiments

1st place: KP1.00084: An experimental study of low Re cavity vortex formation embedded in a laminar boundary layer — Sashank Gautam, Amy Lang, Jacob Wilroy — University of Alabama

2nd place: KP1.00086: Flexible Blades for Wind Turbines — Madeline Carlisle Collins, David MacPhee, Caleb Harris — University of Alabama

Category 3: Microfluidics and Interfaces

1st place: KP1.00091: How does the micro-splashing threshold change with drop size? — Sam J. Boos and Rachel E. Pepper — University of Puget Sound

2nd place: KP1.00090: The injection of a highly focused microjet into a soft target — Nanami Endo, Sennosuke Kawamoto, and Yoshiyuki Tagawa — Tokyo University of Agriculture & Technology

Highlights of the 69th Annual DFD Meeting in Portland, OR

The 2016 DFD meeting was held in November at the Oregon Convention Center in Portland, Oregon. The meeting had more than 2700 contributed papers in up to 38 parallel sessions and 116 entries to the Gallery of Fluid Motion. There were 114 technical posters and 18 student posters submitted from around the world.

In addition to the contributed abstracts, there were 4 award lectures (See page 5 for 2016 award winners) and 8 invited lectures, 5 minisymposia covering 2 topic areas and 3 focus sessions covering 2 topics of interest.

2016 Invited Lectures**Arezoo Ardekani, Purdue University**

Settling and Swimming in Density Stratified Fluids

Philippe Claudin, École Supérieure de Physique et Chimie Industrielles

An Explanation for the Bedforms on Comet 67P/Churyumov-Gerasimenko