# **Research Highlights**



#### Orientational order in concentrated suspensions of spherical microswimmers

Arthur A. Evans, Takuii Ishikawa, Takami Yamaguchi, and Eric Lauga

The authors use numerical simulations to probe the dynamics of concentrated suspensions of spherical microswimmers interacting hydrodynamically. Unlike previous work, it is shown that isotropic suspensions of spherical swimmers are also always unstable.

#### Phys. Fluids 23, 111702 (2011)

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#### Rheology of binary granular mixtures in the dense flow regime

Anurag Tripathi and D. V. Khakhar

Results are presented for a single component system and binary mixtures with particles of different size and density. Inclination angles, composition, size ratios and density ratios are varied to obtain different segregated configurations at equilibrium.

# Phys. Fluids 23, 113302 (2011)



# Maximum speed of dewetting on a fiber

Tak Shing Chan, Thomas Gueudré, and Jacco H. Snoeijer

A solid object can be coated by a nonwetting liquid since a receding contact line cannot exceed a critical speed. The authors theoretically investigate this forced wetting transition for axisymmetric menisci on fibers of varying radii.

# Phys. Fluids 23, 112103 (2011)

### Spatiotemporal persistence of spectral fluxes in two-dimensional weak turbulence

Douglas H. Kelley and Nicholas T. Ouellette

Using a recently developed filtering technique, the authors study the spatiotemporal properties of the scale-to-scale fluxes of energy and enstrophy in a weakly turbulent experimental quasi-two-dimensional flow.

Phys. Fluids 23, 115101 (2011)

#### More Research Highlights



