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Janus particles at the liquid-liquid interface QIAN CHEN, STEPHEN ANTHONY, STEVE GRANICK, University of Illinois Urbana Champaign — Dipolar Janus particles (negatively charged on one side, positively charged on the other), deposited on PDMS droplets in water, are studied in real time by fluorescence and phase contrast microscopy. Crystals form, under some conditions with long-range hexagonal order, but this self-assembled structure depends strongly on particle size and ionic strength of the water phase. Their provocative translational and rotational dynamics is studied using single-particle tracking.

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