

Abstract Submitted
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Sublimation of two dimensional wet granular matter under swirling motion KAI HUANG, INGO REHBERG, Experimentalphysik V, Universitaet Bayreuth, 95440 Bayreuth, Germany — The dynamical behaviors of two dimensional wet granular matter under swirling motion is studied by experiments. Different from dry granular matter, the cohesion induced by capillary bridges formed between particles tends to keep the wet granular clusters rigid against swirling motion. However, the rigid clusters are not stable: random sublimation and deposition transitions are observed. The transition dynamics and morphological changes of rigid clusters are studied by particle tracking techniques. The mechanism driving the transitions will also be discussed.

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