Abstract Submitted
for the DFD17 Meeting of
The American Physical Society

Bubble clustering in a glass of stout beer FUMIYA IWATSUBO, TOMOAKI WATAMURA, KAZUYASU SUGIYAMA, Osaka Univ — To clarify why the texture in stout beer poured into a pint glass descends, we investigated local time development of the void fraction and velocity of bubbles. The propagation of the number density distribution, i.e. the texture, appearing near the inclined wall is observed. We visualized individual advective bubbles near the inclined wall by microscope and measured the local void fraction using brightness of images while the velocity of bubbles by means of Particle Tracking Velocimetry. As the result of measurements, we found the local void fraction and the bubbles advection velocity increase and decrease repeatedly with a time delay. We conclude the texture pattern is composed of fluid blobs which contain less bubbles; extruding and suction flows respectively toward and from the interior of the container form respectively in front and back of the blobs.

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Date submitted: 29 Jul 2017 Electronic form version 1.4