

Abstract Submitted
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Experimental study of splashing mechanisms by an immersed rotating body MICKAEL BOURGOIN, Laboratoire de Physique, University of Lyon, Ecole Normale Supérieure de Lyon, CNRS, DIEGO RODRIGUEZ, SAKSHAM GAKHAR, LEGI, Université Grenoble Alpes, France, JEAN-PHILIPPE MATAS, LMFA, University of Lyon, France, REMI BERGER, PSA Peugeot Citroën, Velizy, France — We study the entrainment of water by a rotating wheel, as a function of the rotation frequency, wheel radius and depth of immersion. The entrainment leads to the formation of a liquid sheet on the ascending side, and of ligaments on the descending side. These structures are captured via simple models. We measure via image processing the liquid flux ejected by the wheel.

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