

Abstract Submitted
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Spray Generation by Collective Bubbles Bursting¹ BAPTISTE NEEL, LUC DEIKE, Princeton University — The bursting of surface bubbles, understood as a production mechanism of sea spray aerosols, is a key feature of mass transfer between ocean and atmosphere. While recent progress has been made to understand the role of water physico-chemistry on the aerosols, experimental works linking collective effects on the bubbles assembly to the spray production remain elusive. Our study, based on a laboratory controlled bubble plume, characterizes directly different surface bubbles collective behaviors, as well as the related spray production. We highlight the role of surface-active material on the surface bubbles and the consequences for the spray.

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Baptiste Neel
Princeton University

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