

Drop impacts: sheets and interactions

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Drop impacts on surfaces can splash and create secondary droplets. These have important implications for industrial, environmental, and health processes such as air contamination by secondary pathogen-bearing droplets shaping disease transmission. Here, we discuss the results of our recent combined experimental and theoretical study of radially expanding sheets formed from the impact of a drop on a small surface of comparable size to that of the impacting drop. We show results that allow to unify the thickness profile of unsteady expanding sheets in the air and quantify the effect of the surface on the dynamics of the sheet in the air. We also highlight new important modes of drop impacts and drop-drop interactions on surfaces of average wetting.