Abstract Submitted
for the DFD12 Meeting of
The American Physical Society

Impact force of a falling drop DAN SOTO[1], CRISTOPHE CLANET, DAVID QUERE, PMMH / Ladhyx, XAVIER BOUTILLON COLLABORATION[2]
— Controlling droplet deposition is crucial in many industrial processes such as spraying pesticides on crops, inkjet printing or spray coating. Therefore, the dynamics of drop impacts have been extensively studied for more than one century. However, few literature describe the impacting force of a drop on a solid flat surface, although it might be a way to measure the size distribution of a collection of falling drops. We investigated experimentally how the instantaneous force at impact depends on impact velocity and drop radius. We also propose a new model to understand our observations.

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Date submitted: 23 Jul 2012 Electronic form version 1.4