

Abstract Submitted  
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**Instability of a large Leidenfrost drop under confinement** PASCAL RAUX, GUILLAUME DUPEUX, CHRISTOPHE CLANET, DAVID QUERE, Ladhyx, Ecole Polytechnique, Palaiseau, France and PMMH, ESPCI, 10 rue Vauquelin, Paris, France — A Leidenfrost drop confined between two hot plates is unstable, when large enough. After a short delay necessary to build a vapor pocket at its center, it forms a ring which rapidly expands and eventually bursts. We analyze this instability, and show that the ring size increases in a non-linear manner, as a function of time, in agreement with the experiments.

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