

Abstract Submitted
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Spontaneous rotation of a melting ice disk¹ STEPHANE DORBOLO, FNRS-Universite de Liege, NICOLAS VANDEWALLE, universite de liege, BAPTISTE DARBOIS-TEXIER, USACH, chile, GRASP TEAM — Ice disks were released at the surface of a thermalised aluminium plate. The fusion of the ice creates a lubrication film between the ice disk and the plate. The situation is similar to the Leidenfrost effect reported for liquid droplet evaporating at the surface of a plate which temperature is above the boiling temperature of the liquid. An analogy is depicted between the Leidenfrost phenomenon and the rapid fusion of a solid at the contact of a hot plate. Similarly to Leidenfrost droplet, we observe that, while the ice disks were melting, the disks were very mobile: translation and rotation.

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