

Abstract Submitted
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Rotating ice blocks¹ STEPHANE DORBOLO, NICOLAS ADAMI, Univ de Liege, GRASP TEAM — The motion of ice discs released at the surface of a thermalized bath was investigated. As observed in some rare events in the Nature, the discs start spinning spontaneously. The motor of this motion is the cooling of the water close to the ice disc. As the density of water is maximum at 4°C, a downwards flow is generated from the surface of the ice block to the bottom. This flow generates the rotation of the disc. The speed of rotation depends on the mass of the ice disc and on the temperature of the bath. A model has been constructed to study the influence of the temperature of the bath. Finally, ice discs were put on a metallic plate. Again, a spontaneous rotation was observed.

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