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Thermal antibubble¹ STEPHANE DORBOLO, Univ de Liege, BENOIT SCHEID, ULB, BAPTISTE DARBOIS-TEXIER, USACH, LAURENT MAQUET, Universite de Lyon, GRASP TEAM, TIPS TEAM, PHYSICS DEPARTMENT TEAM, ILM TEAM — The impact of a droplet on a pool, again... Droplets of a volatile liquid are dropped on a hot pool of oil. The temperature of the pool is beyond the boiling temperature of the liquid that the droplet is made of. For a given set of parameters (impact height, droplet size, temperature of the bath), the droplet penetrates below the surface of the bath being protected by a thin film of vapor. This object reminds the antibubble case that is the opposite picture of a bubble: instead of having a spherical thin film of a liquid in a gas, the antibubble is a thin film of gas in a liquid.

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