

Abstract Submitted  
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**The encapsulation of droplets**<sup>1</sup> NICOLAS VANDEWALLE, University of Liege, Belgique, DAVID QUÉRÉ, Collège de France, France, ELISE LORENCEAU, University of Marne-la-Vallée, STÉPHANE DORBOLO, University of Liege, GRASP COLLABORATION, LABORATOIRE DE PHYSIQUE DE LA MATIÈRE CONDENSÉE.UMR 7125 COLLABORATION, LPMDI COLLABORATION — Various means for encapsulating liquid droplets are presented. That allows miscible liquids to be isolated from each other using a third fluid. Unusual fluid objects are obtained like antibubbles and liquid onions, using silicon oils and water/surfactant mixtures. The properties of such systems are given. Stability and phase diagrams are deduced from experiments. Mechanisms for the formation of encapsulated droplets are discussed. Some applications and future investigations are suggested.

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