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(G*) The pendant drop experiment for aggregates of adhesive granular particles

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Classical experiments, typically performed using bulk continuous matter can be applied for granular systems to better understand their properties, and explore the analogies between granular and bulk continuous systems. While the classic pendant drop experiment can be used to measure the interfacial tension between fluids, here we perform the granular version of the pendant drop experiment. The system consists of aggregates of adhesive, monodisperse, frictionless oil droplets in an aqueous solution. Depending on the system parameters, the properties of aggregates resemble both liquid-like and solid-like systems.

Keyword-1

granular material

Keyword-2

pendant drop

Keyword-3

colloids

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