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The structure of colloidosomes with tunable particle density: simulation vs experiment

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Colloidosomes are created in the laboratory from a Pickering emulsion of water droplets in oil. The colloidosomes have approximately the same diameter and by choosing (hairy) particles of different diameters it is possible to control the particle density on the droplets. The experiment is performed at room temperature. The radial distribution function of the assembly of (primary) particles on the water droplet is measured in the laboratory and in a computer experiment of a fluid model of particles with pairwise interactions on the surface of a sphere.

Comments: 16 pages, 2 tables, 7 figures

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