

Abstract Submitted
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Patchy particles using colloidal caps CHRISTINE MIDDLETON,
DAVID PINE, New York University — We present a method for making patchy
particles functionalized with single stranded sticky end DNA only on their patches.
This is done by adding “spherical cap” particles as patches to spherical colloids us-
ing the depletion interaction. The caps are then functionalized with single stranded
DNA using copper-free click chemistry. Due to being attached only by depletion,
the patches diffuse on the surface of the particle. The patchy particles can then
interact with each other in a specific, directional way through the mobile, DNA
functionalized patches.

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