

Abstract Submitted
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Error-Free DNA Directed Self-Assembly of Nanoparticle Clusters

NICHOLAS LICATA, ALEXEI TKACHENKO, University of Michigan — We study DNA directed self-assembly of colloids into structures with controllable geometries. By introducing a soft-core repulsive potential between colloids, we can overcome excluded volume effects. A toy model is constructed to demonstrate these ideas, and its phase behaviour is studied numerically. We explain the route by which our proposal can be implemented experimentally.

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