

Molecular Systems Engineering with DNA: Four pieces, one rule, and many possibilities

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It is notoriously difficult to observe, let alone control, the position and orientation of molecules because of their small size and the constant thermal fluctuations that they experience in solution. Molecular self-assembly with DNA provides a route for placing molecules and constraining their fluctuations in userdefined ways, thereby opening attractive and unprecedented avenues for scientific and technological exploration. In my talk I will introduce some of the key concepts and methods, and highlight a number of recent applications.