

## **Active 3D DNA Plasmonics**

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We utilize structural DNA technology to achieve a 3D plasmonic nanostructure with engineerable optical response and active functionalities. Plasmonic metal particles are assembled at specific locations on an active 3D DNA origami template with nanometer scale accuracy.

The plasmonic system constitutes a well-defined 3D configuration with unique optical response. Due to the intrinsic programmability and excellent functionalities of DNA, the plasmonic nanostructure can respond to external stimulus upon recognition of biochemical events or stimulated movements of the DNA template. This will enable a new generation of 3D plasmon rulers.

**Monday, October 20<sup>th</sup>, 2014 at 11:30**  
**Seminarroom 1.079**  
**Institute for Computational Physics, Allmandring 3**