Geometry, Groups and Dynamics/GEAR Seminar (held at the Illinois hub of GEAR )

## 12:00 pm, Thursday, September 1, 2016, 243 Altgeld Hall

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## Gauge theory for webs and foams

Abstract: I will discuss how to use Instanton Floer theory ideas to construct invariants of Webs (knotted trivalent graphs) in the three manifolds. These invariants are functorial for Foam cobordisms. The talk will discuss some properties of these invariants and some computational tools. A particular variant of this story might be applicable lead to a non-computer aided proof of the four color theorem.

<u>Video</u>