

***THE BOGOMOLNY EQUATIONS AND THE  
KAPUSTION-WITTEN EQUATIONS WITH A KNOT  
SINGULARITY***

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**Time: Mon., Nov. 20<sup>th</sup>, 9:15-10:15**

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**Abstract:**

It is well known that PDEs in gauge theory are useful in the study of low dimensional topology and knot theory. In this talk, I'll introduce some recent studies on two PDEs in gauge theory that are conjectured to be useful in knot theory. One of them is the Bogomolny equations and the other one is the Kapustin-Witten equations. We focus on the moduli space of their solutions with a knot singularity.