

Boğaziçi  
**MATH COLLOQUIUM**

**The Geometry of Moduli Spaces of Sheaves on Surfaces**

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**Abstract:**

Moduli spaces of sheaves on surfaces are higher rank analogues of Hilbert schemes of points and play a central role in mathematics with applications ranging from algebraic geometry to Donaldson's theory of 4-manifolds, from combinatorics to mathematical physics. In this talk, I will describe some recent developments on our understanding of the geometry of these moduli spaces, concentrating on the Brill-Noether problem and the cohomology of these moduli spaces. This talk will be based on joint work with Jack Huizenga and Matthew Woolf.

**Date :** Wednesday, August 7, 2019

**Time:** 13:30

**Place:** TB 130, Boğaziçi University