



**Speaker:** Dylan Allegretti  
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Monday, November 23, 2015

2:00 PM

258 Hurley Hall

**Title:** Quantization of Fock and Goncharov's canonical basis

**Abstract:**

In a famous paper from 2003, Fock and Goncharov defined a version of the space of  $\mathrm{PGL}(2, \mathbb{C})$ -local systems on a surface and showed that the algebra of functions on this space has a canonical basis parametrized by points of a dual moduli space. This algebra of functions can be canonically quantized, and Fock and Goncharov conjectured that their canonical basis could be deformed to a canonical set of elements of the quantized algebra. In this talk, I will describe my recent work with Hyun Kyu Kim proving Fock and Goncharov's conjecture.