



HARVARD UNIVERSITY  
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# Mathematical Picture Language Seminar



**Thursday, Oct 23**

**4:00 p.m. Boston time**

**Jefferson 368**

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## Tensor networks, fusion categories and operator algebras

**Abstract:** Certain 4-tensors have been used to study two-dimensional topological order, and we identified them with bi-unitary connections in subfactor theory of Jones before. This identification gives a description of a fusion category using a (possibly non-flat) bi-unitary connection, which arises as quantum 6j-symbols for a multi-fusion category. We further advance this identification by working on the zipper condition, which is a kind of pentagon equation, and flat fields of strings.



Zoom QR Code & Link:

<https://harvard.zoom.us/j/779283357?pwd=MitXVm1pYUIJVzZqT3lwV2pCT1ZUQTog>

Passcode: 657361

<https://mathpicture.fas.harvard.edu/seminar>