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**Tuesday, March 30, 2021, at 10:00 (Boston)
15:00 (UK/Eire) 16:00 (C.Europe) 22:00 (China)**
Mathematical Picture Language Seminar

Zoom at: <https://harvard.zoom.us/j/779283357?pwd=MitXVm1pYUIJVzZqT3lwV2pCT1ZUQT09>

The wondrous world of hyperfinite subfactors
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Abstract. The hyperfinite II_1 factor contains a wealth of subfactors, many of which give rise to new and fascinating mathematical structures. For instance, the standard representation of a subfactor generates a certain unitary tensor category that Jones described as (what he called) a “planar algebra.” It is a complete invariant for amenable, hyperfinite subfactors due to a deep result of Popa. However, generic subfactors are not amenable, and one typically does not know how to distinguish them. I will discuss a notion of “noncommutativity” for a subfactor that provides an invariant that is complementary to the planar algebra. Bare hand constructions of hyperfinite subfactors generally lead to “commutative” examples, and I will explain a theorem that allows us to produce “very noncommutative” ones as well. It involves actions of suitable groups on the hyperfinite II_1 factor.

