Higher-genus symmetric enveloping algebras and topological field theories

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The symmetric enveloping algebra associated to a subfactor was introduced by Popa in order to translate the amenability question to a hyperfiniteness question. Building on the work of Ocneanu, Evans-Kawahigashi, and Popa-Shlyakhtenko-Vaes, Neshveyev and Yamashita showed that symmetric enveloping algebras encode the Drinfeld centers of the standard invariants of subfactors. In this talk, I will discuss how every surface with boundary gives rise to extensions of the C*-algebraic version of symmetric enveloping algebras, and how they are related to the construction of a 2-dimensional topological quantum field theory.