ID de Contribution: 12

Boundary states of a bulk gapped ground state in 2-D quantum spin systems

mardi 28 mai 2024 10:00 (55 minutes)

We introduce a natural mathematical definition of boundary states of a bulk gapped ground state in the operator algebraic framework of 2-D quantum spin systems.

With the approximate Haag duality at the boundary, we derive a C-tensor category M out of such boundary state. Under a non-triviality condition of the braiding in the bulk, we show that the Drinfeld center (with an asymptotic constraint) of M is equivalent to the bulk braided C-tensor category.

Orateur: OGATA, Yoshiko (Kyoto University)