« Atelier sur l'information quantique et mécanique statistique quantique » 15 au 19 octobre 2018

"Workshop on Quantum Information and Quantum Statistical Mechanics" October 15-19, 2018

Highly entangled spin chains and exact tensor networks

Israel Klich*

ik3j@virginia.edu

I will describe new results on the high and low entangled ground states of deformed Moztkin and Fredkin and related models. I will present new exact tensor networks for these states, in the scale invariant limit and the highly entangled rainbow phase, which, remarkably, are the first examples of holographic tensor networks with finite bond dimension for ground states of gapless local Hamiltonians, and their relation to certain tiling problems.

^{*}Department of Physics 311D, University of Virginia, 382 McCormick Rd., Charlottesville, VA 22904, USA