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# Symmetry resolved entanglement in excited states in QFT

*Thursday, 31 March 2022 10:00 (1 hour)*

In this talk the excess entanglement resulting from exciting a finite number of quasiparticles above the ground state of a free integrable quantum field theory in 1+1D with an internal U(1) symmetry will be studied. It will be shown both for bosons and fermions theories that the ratio of charged moments between the excited and ground states take a extremely simple and universal form depending on the number and statistics of the excitations and on the charges associated to the underlying U(1) symmetry. The formulae obtained for this ratio of charged moments can be numerically checked for some lattice models.

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