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Failure of the GGE for integrable models with bound states[1]
NATAN ANDREI, GARRY GOLDSTEIN, Rutgers University — In this work we study the applicability of the local GGE to integrable one dimensional systems with bound states. We find that the GGE, when defined using only local conserved quantities, fails to describe the long time dynamics for most initial states including eigenstates. We present our calculations by studying the attractive Lieb-Liniger gas and the XXZ magnet, though similar results may be obtained for other models.

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