

Non-equilibrium Floquet steady states of time-periodic driven Luttinger liquids

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Time-periodic driving facilitates a wealth of novel quantum states and quantum engineering. The interplay of Floquet states and strong interactions is particularly intriguing, which we study using time-periodic fields in a one-dimensional quantum gas. The system is modeled by a Luttinger liquid with periodically changing interactions. By developing a time-periodic operator algebra, we are able to solve and analyze the complete set of non-equilibrium steady states. Complex valued Floquet eigenenergies occur when integer multiples of the driving frequency approximately match twice the dispersion energy, which correspond to resonant states. Including damping effects we show that this resonant behavior leads to a large number of density excitations. This setup is one of the rare cases, where the full Floquet solution can be obtained exactly for a time-periodically driven many-body system.

Liviu Chioncel lädt Sie zu einem geplanten Zoom-Meeting ein.

Thema: TRR80 seminar

Uhrzeit: 6.Juli.2021 16:00 PM Amsterdam, Berlin, Rom, Stockholm, Wien

Zoom-Meeting beitreten

<https://uni-augsburg.zoom.us/j/97058485812?pwd=VDU4cTI2SzQwdWI2V0piaGJzV3ZIUT09>

Meeting-ID: 970 5848 5812

Kenncode: N%&6X1

Schnelleinwahl mobil

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+496938079883,,97058485812#,,,,*559530# Deutschland

Einwahl nach aktuellem Standort

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+49 69 3807 9883 Deutschland

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Über SIP beitreten

97058485812@zoomcrc.com

Über H.323 beitreten

162.255.37.11 (USA

Westen)

162.255.36.11 (USA

Osten)

213.19.144.110 (Amsterdam

Niederlande)

213.244.140.110 (Deutschland)

69.174.57.160 (Kanada Toronto)

65.39.152.160 (Kanada Vancouver)

207.226.132.110 (Japan Tokio)

149.137.24.110 (Japan Osaka)

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