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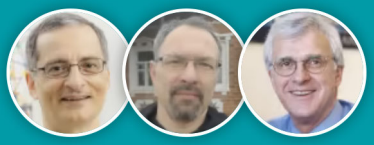
Nonadiabatic Landau–Zener–Stückelberg–Majorana transitions, dynamics, and interference

Franco Nori and Sergey N. Shevchenko



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Date: Wednesday, July 26, 2023 3:00 PM (Europe/Amsterdam)

Wednesday, July 26, 2023 10:00 PM (Etc/GMT-9)

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Article of record

Associated publication

O. Ivakhnenko et al. (2023) Nonadiabatic Landau–Zener–Stückelberg–Majorana transitions, dynamics, and interference. *Physics Reports*, 995

View on publisher site

Nonadiabatic Landau–Zener–Stückelberg–Majorana transitions, dynamics, and interference

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Chaired by **David Campbell**

Since the pioneering works by Landau, Zener, Stuckelberg, and Majorana (LZSM), it has been known that driving a quantum two-level system results in tunneling between its states. Even though the interference between these transitions is known to be important, it is only recently that it became both accessible, controllable, and useful for manipulating a growing number of quantum systems. Here, we study systematically various aspects of LZSM physics

and review the relevant literature, significantly expanding the review article [2].

References

1. O. Ivakhnenko et al. (2023) Nonadiabatic Landau–Zener–Stückelberg–Majorana transitions, dynamics, and interference. *Physics Reports*, 995
2. S. Shevchenko et al. (2010) Landau–Zener–Stückelberg interferometry. *Physics Reports*, 492(1)

Grants

Army Research Office `W911NF-20-1-0261`

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Asian Office of Aerospace Research and Development `1`

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