

Friday, May 2nd (at 4.00pm, UK time)

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Title: (Quantum) Separation of Variables and Its Relations to BKM Systems.

ABSTRACT

I will present two seemingly independent results.

The first is based on the recent paper arXiv:2501.18082, joint with Jonathan Kress. In this relatively short and simple note, we proved a conjecture explicitly formulated by Błaszak et al. in 2016, which states that every Stäckel integrable system is classically quantisable.

The second group of results concerns the construction of finite-gap solutions for BKM systems. We reduce the problem to the study of a certain Stäckel integrable system. These results are based on arXiv:2410.00895, and are joint with Alexey Bolsinov and Andrey Konyaev.

If time permits, I will also explain the connection between these two sets of results.
