

Some inverse spectral results for semiclassical operators

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Since Kac's famous question [4], inverse spectral problems have been widely studied, and recently, numerous results have been obtained in the semiclassical limit (e.g. [8, 3, 2, 7, 1, 6]). In this talk I will define semiclassical integrable systems, which include the cases of Berezin-Toeplitz and pseudodifferential operators, and introduce the inverse spectral question for such systems. I will then review some recently established results, in particular some joint work with Álvaro Pelayo and San Vũ Ngọc [5]. The general strategy to solve these problems relies on interplay between symplectic classification results and spectral theory.

References

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