

Semi-classical Analysis of Integrable Systems

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I plan to discuss some of the following topics:

- Microlocalization, pseudo-differential operators and star-products
- Bohr-Sommerfeld rules, toric integrable systems and the Poisson summation formula
- Hyperbolic singular points and singular quantization rules
- Application to the quantum adiabatic Theorem and the Landau-Zener formula

Possible books are Dimassi-Sjöstrand, San Vu Ngoc, Evans-Zworski.

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