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Integrable Hamiltonian systems imply the procedure of canonical quantization, as shown in [?] by the example of hierarchy of isotropic Landau-Lifshits equation also called the continuous Heisenberg magnetic chain. The canonical quantization arises as a representation of the phase space symmetry algebra over the space of functions on a Lagrangian manifold. The latter coincides with the Liouville torus of the integrable system. The example of isotropic Landau-Lifshits hierarchy brings to associate Laguerre polynomials which serve as a basis in the representation space.

## References

- [1] J. Bernatska, P. Holod, Harmonic analysis on Lagrangian manifolds of integrable Hamiltonian systems, *Journal of Geometry and Symmetry in Physics*, **29** (2013), pp. 39–51; arXiv:1307.1785

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