

Neural Canonical Transformations

Wednesday, 27 August 2025 09:30 (1 hour)

Neural canonical transformation leverage modern generative models to parametrize variational density matrix of many-particle systems and optimize them via the variational free energy principle. The approach finds applications in studying the equations of state of electron gas, dense hydrogen, and quantum solids. In this talk, I will present physical motivation behind the design of the method and some physical results related to lithium quantum solid.

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