

Quantum Dynamics and Transport of Spins in Magnets

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Spin dynamics and transport in condensed matter are key elements that give rise to various functions of spintronics. Recent development of spintronics measurement technique and spectroscopy has allowed us to approach quantum spin dynamics and transport. Here we report nonlinear magnetization dynamics in ferrimagnets measured in terms of Wigner functions, nuclear spin transport in antiferromagnets, and electron spin transport in spin liquids in oxides.

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