

Magneto-electric coupling in spiral magnets

Naoto Nagaosa

*Department of Applied Physics, The University of Tokyo,
Tokyo 113-8656, Japan*

Keywords: spiral spins, spin current, electric polarization, collective modes

I will discuss the magneto-electric (ME) coupling in spiral magnets such as RMnO₃. This is induced by the spin current associated with the non-collinear spins, and Aharonov-Casher effect. The collective modes, dynamical aspects of the ME coupling, and fluctuations at finite temperature are also discussed.

References

H. Katsura, N. Nagaosa, and A. V. Balatsky, Phys. Rev. Lett. **95**, 057205 (2005)