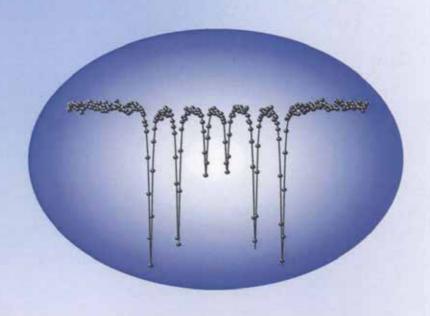
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Spin-Lattice Coupling in Multiferroic Materials

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Despite the coexistence of ferroelectricity and magnetism in multiferroic compounds, a pronounced interplay between these properties had rarely been observed. However, there have been recent discoveries of intriguing spin-lattice coupling effects in the multiferroics, including the reversible flipping of polarization (magnetization) actuated by magnetic (electric) field as well as the giant change of dielectric constant by applied magnetic field.

This presentation will be focused on the resent experimental findings on multiferroic *ReMnO*₃ and GaFeO₃.