

# ***Spin-orbit coupling at oxide interfaces***

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Electronic structure of LaAlO<sub>3</sub>/SrTiO<sub>3</sub>. Role of spin-orbit coupling and structural distortions.

Overview of theoretical results.

Magnetotransport in the diffusive limit.

Magnetotransport in the semiclassical Boltzmann picture.

Magnetotransport in the Kondo interpretation.

Photoemission spectroscopy.

Interplay of spin-orbit coupling and superconductivity. Enhancement of critical magnetic field.

5d systems: KTaO<sub>3</sub> and outlook on iridates.