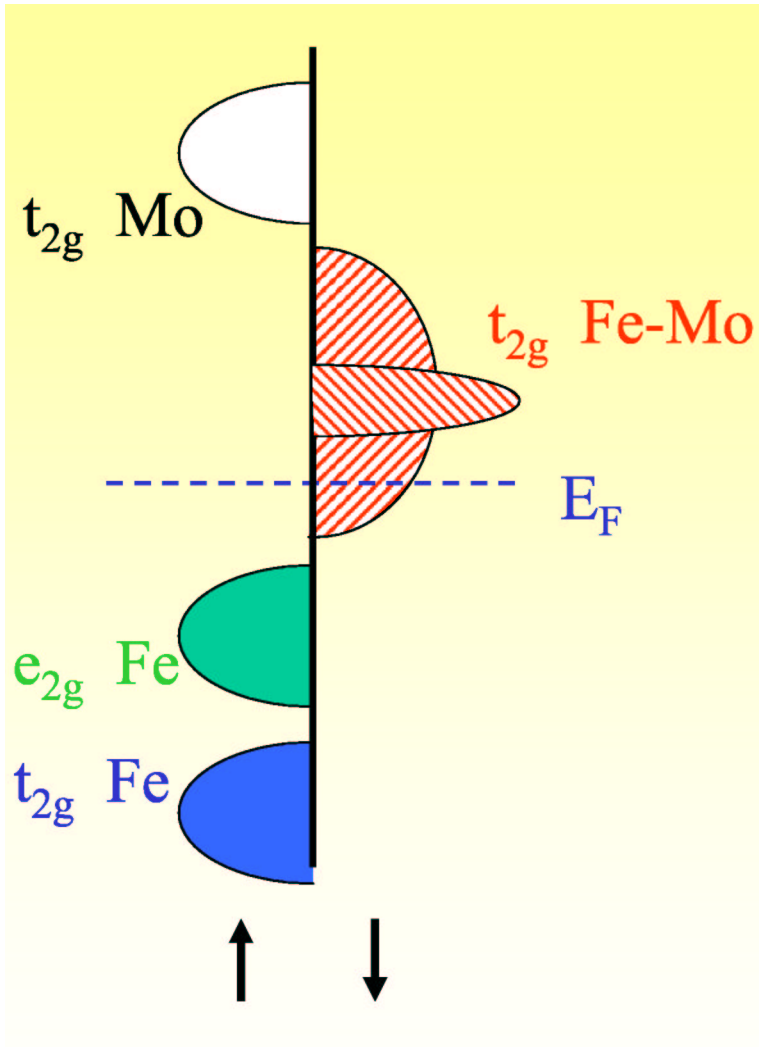


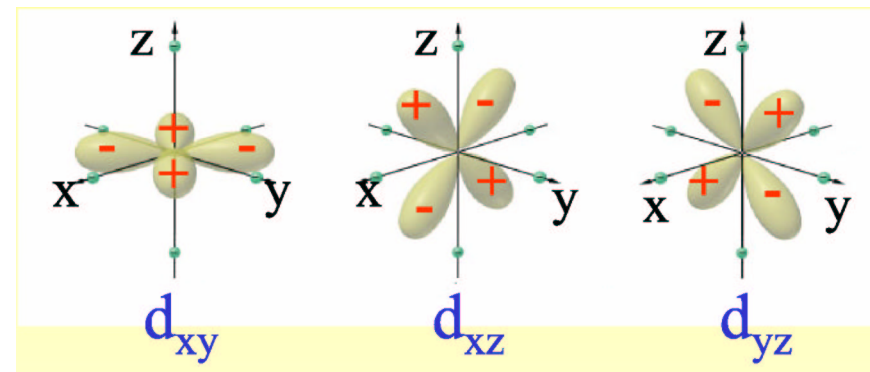
Orbital Geometry and Band Structure

Ferromagnetic Band structure



T=0 ferromagnetic DOS

t_{2g} orbitals



- The symmetry of the t_{2g} orbitals implies that a given orbital can mix only with orbitals of the same symmetry and only with orbitals in the corresponding plane. $d_{\alpha\beta}$ lies in the plane $\alpha\beta$
- The band structure is the sum of three two dimensional tight binding systems
- Key energy scales:

$t_{\text{Mo-Fe}}$ $t_{\text{Mo-Mo}}$ J Δ