Control and manipulation of charge and spin in single and coupled quantum dots
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I will discuss measurements of the spin lifetime in self-assembled InGaAs dots in GaAs. The spin relaxation time ($T_1$) is found to be extremely long (e.g. $>25$ms at $T=1K$, $B=4T$) decreasing with magnetic field according roughly to a clear $B^{-4}$ power law [1]. Furthermore, $T_1$ is found to reduce linearly with lattice temperature and be very strongly sensitive to the motional quantisation (s-p shell splitting).