



Figure 38: Hypothetical deflection profiles for different coupling cases. (a) Spin strongly coupled to the total angular momentum of the cluster produces a pedestal-like distribution of magnetic moments. (b) Spin strongly coupled to the cluster axis produces a logarithmic distribution of magnetic moments. (c) Spin uncoupled produces two projections. (d) Spin in contact with a thermal bath produces a small thermally averaged deflection. The dashed lines are the profiles with zero field and the continuous lines are with a magnetic field applied. The magnetic moment distributions have been convoluted with the undeflected peaks to get the simulated profile.