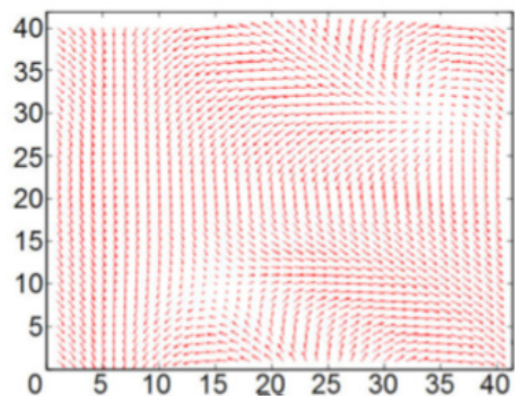
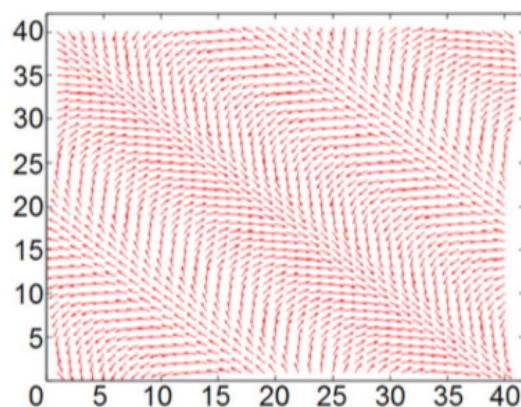


Supplementary Material



a



b

Fig. S1. Ground state spin configuration for weak couplings: $J^{mf} = -0.15$ (a), -0.75 (b).

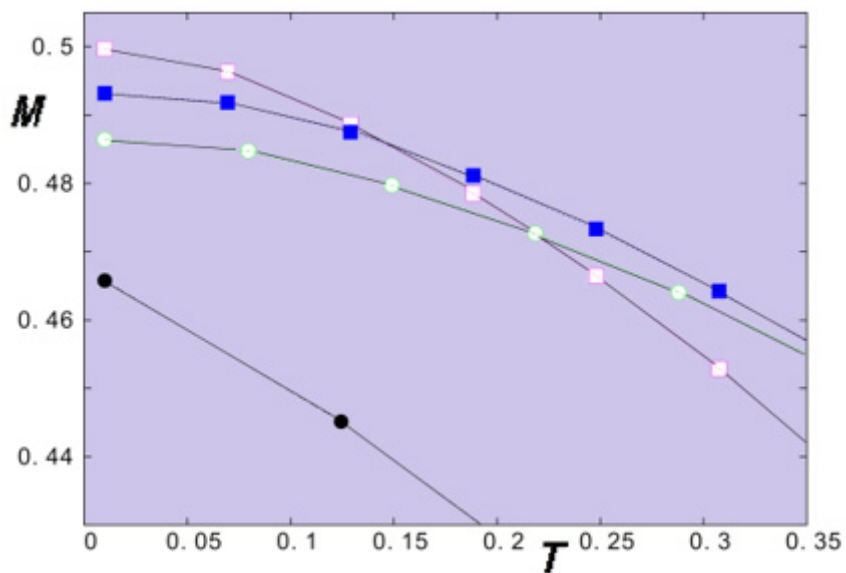


Fig. S2. Zoom at low T to show magnetization cross-overs.