MAGNETIC MOMENT AND POLARIZABILITY OF THE VECTOR STRANGE MESONS FROM LATTICE QCD

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We explore the ground state energy behaviour of the vector K^* mesons in external abelian magnetic field of QCD scale in SU(3) lattice gauge theory. We calculate the magnetic polarizability of the neutral and magnetic moment of the charged K^* mesons by background field method and investigate the dependence of these physical quantities from the value of m_s/m_d ratio.