

RADIATIVE DECAYS OF THE  $b$ -QUARK VECTOR MESONS

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A b s t r a c t:

We treat the M1 transitions of vector mesons,  $V \rightarrow P\gamma$ , using a five-quark model and the assumption that the effective magnetic moments of quarks, in addition to the standard values, have to include an anomalous moment contribution from the magnetic coupling of the photon to three and more gluons. The values of the magnetic moments somewhat differ from the corresponding values in the standard nonrelativistic quark model. We include an estimate of the decay widths for  $V \rightarrow P\gamma$  in the case of the " $B^*$ " vector mesons.