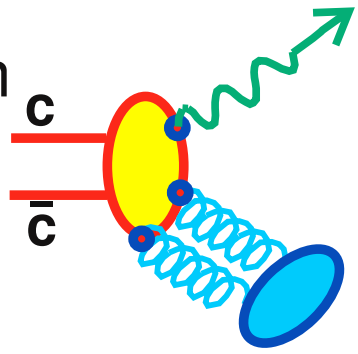
Motivation for this analysis

The $\xi(2230)$ is possibly a Glueball
The argumentation is based on the following facts:

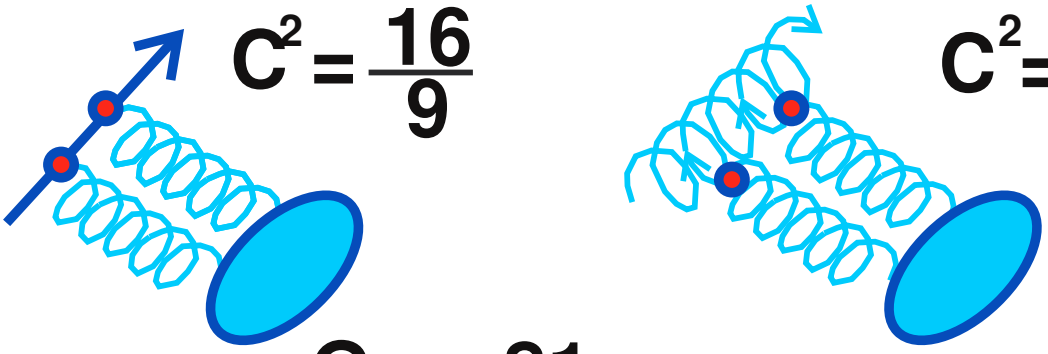
- This is a narrow signal seen only in radiative J/ψ decays (glue rich environment) by MARK III and BES



- decays seen not only with strange quarks $\Rightarrow$flavour independent decays (BES: $K^0_S K^0_S$, K^+K^-, $\pi\pi$, $\eta\eta$, $p\bar{p}$)

- Not seen in $\gamma\gamma$ collisions (CLEO) (bad coupling with photon)

In hadronic Z decays, we may suppose that Glueball production would be favoured in the fragmentation of hard gluons, and, hence, in Gluon-jets.



$$C^2 = \frac{16}{9} \qquad C^2 = 9$$

$$\frac{G}{Q} = \frac{81}{16} = 5$$