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## Lifetime and confinement of a quasi-gluon

*Tuesday 25 October 2022 10:00 (30 minutes)*

The problem of confinement and the nature of the gluon are discussed in the framework of the screened massive expansion, a perturbative analytical approach to non-perturbative QCD.

After a brief review of the method, the main findings are outlined with some emphasis on the analytic properties of the gluon propagator and on the nature of the complex conjugated poles.

Some conjectures are analysed on the physical role of the complex poles and their (observable?) effects on string tension, condensates, lifetime, mass spectrum and glueball excitations.

The nature of gluon confinement is re-examined at the light of the emerging scenario.

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