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The Topological Susceptibility via the Gribov horizon?

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The topological susceptibility χ^4 is famous in QCD. It explains the η' mass, solving the $U(1)_A$ problem. It is also known that χ^4 is related with Veneziano Ghost (VG), an unphysical mass pole in topological current K_μ correlator, that ensure $\chi^4 \neq 0$. Recently, Kharzeev and Levin (KL) attempted to connect the VG with confinement and so with Gribov copies (GC) too. However, their result breaks the BRST symmetry. We analyze the topological susceptibility, in SU(3) and SU(2), using Pad $\{ \epsilon \}$ approximation and RGZ gluon propagator in MOM scheme.

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