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## **2+1 Heavy Quark QCD Phase Transitions in Massive Landau-DeWitt Gauge**

We study the QCD phase diagram for 2+1 heavy quarks in the presence of an effective gluon mass term arising from the Gribov copy problem in standard Faddeev-Popov gauge fixing procedures. We compute both the Polyakov loop, which is an order parameter for the confinement/deconfinement transition, as well as an effective background gauge field potential to two loop order in Perturbation Theory. We then present our results for zero, non-zero and imaginary chemical potential and compare them both to a previous 2 loop pure YM study as well as lattice findings.

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