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Color screening in Quark-Gluon plasma at low and high temperatures OLAF KACZMAREK, Bielefeld University, FRITHJOF KARSCH, PETER PETRECKZY, FELIX ZANTOW, Brookhaven National Laboratory — Using quark antiquark free energies we define different length scales which describe the screening length in hot QCD. We find that these length scales drop rapidly in the vicinity of the phase transition and indicate distances which are about twice as large than the inverse Debye mass found in earlier studies. On the one hand our results show no or only little differences when changing from quenched to 2-flavor QCD. On the other hand our analysis supports recent findings that indicate that J/Ψ will show significant medium modifications only at temperatures well above T_c .

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