## **Excited QCD 2012**



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## Detailed study of the quark-antiquark flux tubes

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In this work we compute the color fields in the mediator plane between a static quark and a static antiquark using quenched lattice QCD.

In special, we see the effect of the quark-antiquark distance on this fields. To obtain this results an improved multihit technique is developed

and an extend smearing technique is used. The results for the fields are fitted with different models and in particular the roughening of the

flux tube is observed. By using a variational method in the smearing, the color fields for the excited flux tubes are also calculated and presented.

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