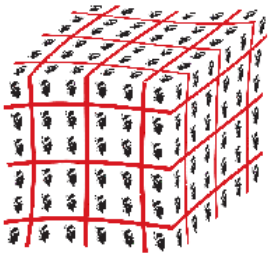

Contribution ID: **138** Type: **not specified**

Colour fields generated by static sources of different SU(3) representations.

Monday, 14 June 2010 17:00 (20 minutes)

The colour fields, created by static sources belonging to different
SU(3) representations, from the 3 to the 27,
are computed in quenched SU(3) lattice QCD, in a $24^3 \times 48$ lattice at $\beta = 6.2$ and $a = 0.07261(85)\ fm$.
We utilize the technique of generalized Wilson Loops to localize the
sources, correlated with plaquettes to measure the
respective colour fields. We investigate the Casimir scaling of the
fields, measured in the static potentials by Bali.
We also study the coherence length, comparing with the dual
Ginzburg-Landau approach. With the penetration and coherence
lengths we determined the Ginzburg-Landau dimensionless parameter,
this result is consistent with a type II superconductor picture,
and with an effective dual gluon mass of 0.905 ± 0.163 GeV.

Please, insert your presentation type (talk, poster)

Talk

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Session Classification: Parallel 06: Vacuum structure and confiment

Track Classification: Vacuum structure and confinement