

Quarks at the Ends of Strings.

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I am fascinated with the old Marcus-Sagnotti "Group Theory from Quarks at the Ends of Strings" (SPIRES <http://www.slac.stanford.edu/spires/find/hep/www?j=PHLTA,B188,58>). Does it imply really that the $SO(32)$ string has 10 different quarks at the terminations. And, should an antiquark count as a different quark in this list?

Is anybody in s.p.r fluent in this topic? I would ask in sps but it seems to be dead.

The result is intriguing because the QCD string, if we think about it, also happens to have, modulo color, 10 different quarks at the terminations: u,c,d,s,b and its antiquarks. It happens because the mass of the top quark is too heavy, and then it disintegrates before binding into mesons (or diquarks), so there is not such a thing as a top-mesonic Regge, trajectory, nor a top-terminated QCD string.

Of course one could point out that if the QCD string is to be considered as a $SO(32)$ Type I string, then we should find some hint of supersymmetry. Perhaps my hep-ph/0512065 has some role to play here, but I already touched this topic last month in other post.

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