

PAUL SCHERRER INSTITUT



Particle Theory Seminar

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“New Production Mechanism for Composite Higgs at the
LHC”

Thursday, December 6, 2012, 11:30

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Abstract:

The LHC has found a 125 GeV boson which seems compatible with the SM Higgs. One interesting possibility is that this new particle is not a fundamental scalar like in the Standard Model but a bound state of some new strong interaction. In this talk I will discuss some particular phenomenological consequences of such composite Higgs models, where new resonances, abundant in these models, can mediate new production mechanisms for the composite Higgs. In particular, I will consider new channels involving the exchange of a massive color octet and single production of new fermion resonances with subsequent decays into the Higgs and a Standard Model quark.