

THE PROTON SPECTRUM WITH ALL-TO-ALL PROPAGATORS

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We introduce a new method to calculate the spectrum of proton with all-to-all propagators in the rest and boost system. By introducing Z2 and Z3 noise vectors and several orthogonal vectors, we can get very clean signal of proton from the correlation function which sums over all sink and source co-ordinates. This new technology will provide a new cheap method to calculate disconnected diagrams of the multi-hadron spectrum in future.