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**Pion loop contribution to the nucleon self-energy interpolated between the instant form and the front form of relativistic dynamics**  
COLTON BRADLEY, CHUENG JI, Department of Physics, North Carolina State University, Raleigh, North Carolina 27695-8202 — The equivalence of the light-front, equal-time and covariant formulations in meson-baryon interactions has been previously demonstrated. In particular, the self-energy of a nucleon dressed by pion loops with the pseudovector  $\pi NN$  coupling has been discussed to show the universality of the leading nonanalytic behavior of the chiral dynamics consistent with QCD. In this poster, we present the link between the instant form dynamics and the light-front dynamics by interpolating them together with an interpolation variable. We confirm the universality of the leading nonanalytic behavior of the chiral dynamics by verifying the independence of this behavior from the interpolation variable.

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