

entire correlation function is needed in order to renormalize the next-to-leading order perturbative contributions. The research in this chapter develops a renormalization methodology that can be applied to next-to-leading order QSR calculations. Key features of this methodology are the renormalization of the diquark current, which is discussed in Chapter 5, and the generation of renormalization-induced contributions to the correlation function.

4.3 Published Article

The Heavy-light diquark article was published in Physical Review D in 2013. Links to the published journal article and preprint are included below.

- R.T. Kleiv, T.G. Steele, Ailin Zhang, and Ian Blokland, Heavy-light diquark masses from QCD sum rules and constituent diquark models of tetraquarks, Phys. Rev. D87 (2013) 125018, arXiv:1304.7816 [hep-ph].