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Quark fragmentation functions in NJL - jet model¹ WOLFGANG BENTZ, Tokai University, HRAYR MATEVOSYAN, ANTHONY THOMAS, University of Adelaide — We report on our studies of quark fragmentation functions in the Nambu-Jona-Lasinio (NJL) - jet model. The results of Monte-Carlo simulations for the fragmentation functions to mesons and nucleons, as well as to pion and kaon pairs (dihadron fragmentation functions) are presented. The important role of intermediate vector meson resonances for those semi-inclusive deep inelastic production processes is emphasized. Our studies are very relevant for the extraction of transverse momentum dependent quark distribution functions from measured scattering cross sections.

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