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Pion Structure from Lattice QCD HUEY-WEN LIN, University of Washington , WILLIAM DETMOLD , College of William and Mary — We present moments of the quark distribution functions of the pion, $< x^n >$, from lattice QCD. The calculation is done for a range of pion masses between 290 and 500 MeV with attention to effects caused by the nonzero lattice spacing and finite volume. We also investigate how the pion structure is modified within a Bose-condensed medium of either pions or kaons. This modification is the mesonic analog of the EMC effect, which we hope to explore for light nuclei in the future.

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