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Photodisintegration of a Proton Pair in ^{3}He STEFFEN STRAUCH, The George Washington University, CLAS COLLABORATION — Hard photodisintegration of the deuteron has been studied extensively in order to understand the dynamics of the transition from hadronic to quark-gluon descriptions of the strong interaction. Recently Brodsky *et al.* [1] have discussed an extension of this program to hard photodisintegration of a proton pair in the ^{3}He nucleus. The $\gamma+^3\mathrm{He}\rightarrow ppn$ reaction was studied in a comprehensive experiment at Jefferson Lab Hall B for photon energies up to 1.55 GeV [2]. The observed cross section for the photodisintegration of a proton pair in ^{3}He is much smaller than for deuteron photodisintegration even at the highest photon energy. Results will be discussed and compared with model calculations. Jefferson Lab experiment E03-101 [3] will be a dedicated experiment to study the photodisintegration of a proton pair in ^{3}He for photon energies up to 5 GeV.
[1] S.J. Brodsky *et al.*, Phys. Lett. B **578**, 69 (2004)
[2] S. Niccolai *et al.*, Phys. Rev. C **70**, 064003 (2004)
[3] Jefferson Lab Experiment E03-101, R. Gilman and E. Piasetzky (spokespersons)

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