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A study of the $\gamma d \to \pi^+\pi^- d$ reaction[1] KENNETH HICKS[2], TAYA CHETRY, Ohio Univ, REINHARD SCHUMACHER, Carnegie Melon Univ, CLAS COLLABORATION — This study investigates a recently-observed $N\Delta$ (d^*) resonance decaying to πd final state using CLAS at Jefferson Lab, Virginia. Tagged photons with beam energies between 0.8 and 3.6 GeV were produced using the bremsstrahlung process incident on a liquid deuterium target. The final state particles detected were an energetic deuteron and a two oppositely charged pions. The d^* resonance has been seen in other preliminary analyses at CLAS. Partial-wave analysis of pion-deuteron scattering has also shown a resonance at a mass of about 2145 MeV. A preliminary differential cross section measurement of this resonance will be presented.

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