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The GlueX Central Drift Chamber YVES VAN HAARLEM, Carnegie Mellon University, GLUEX COLLABORATION COLLABORATION — The GlueX Central Drift Chamber (CDC) is a cylindric detector located close to a liquid hydrogen cell as a part of the GlueX spectrometer in Hall-D at Jefferson Lab. It is designed to track charged particles originating from a 12 GeV polarized photon beam impinging on a liquid hydrogen target. One of the main goals of the GlueX experiment is to map out the hybrid meson spectra. The CDC has to be able to track charged particles with relative large polar angles (6-165°) in a solenoid magnetic field of 2.24 T. Also, this detector has to perform particle identification: to separate pions from protons in a momentum range up to 450 MeV/c. To fulfill these tasks the GlueX collaboration opted for a straw tube chamber because this option minimizes the material in the tracking region. The straw tubes will be 1.5 m long and the chamber will consist of 28 layers (12 axial + 16 stereo) or 3500 straws. The current status of this detector and test results obtained with prototypes will be presented.

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