$\frac{^9\mathrm{Be}(\pi^-,\mathrm{pp})}{^{\mathrm{History}}}$ Type Author Citation Literature Cutoff Date

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1987Go25: This experiment was carried out with a low energy pion beam from the Synchrocyclotron of the Leningrad Institute of nuclear Physics. The search for ⁷H was unsuccessful and no ⁷H states were detected.

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Full Evaluation

2000Ko46, 2005GuZZ, 2007GuZ4, 2009Gu17: A beam of 30 MeV π^- , produced at the Los Alamos Meson Physics Facility (LAMPF) traversed a beryllium moderator and was stopped in a thin target. The experiment was performed with the aid of the double-arm semiconductor spectrometer. The charged particle reaction products were detected by two multi-layered semiconductor telescopes arranged at an angle of 180° with respect to each other. Either telescope consisted of two Si(Au) and fourteen Si(Li) semiconductor detectors. The missing mass spectrum of 7 H with a resolution of 1 MeV (FWHM) was constructed, which shows no resonance behavior near zero but suggests possible evidence of two broad resonances near 16 and 21 MeV, with Γ =2 and 5 MeV, respectively. Later in (2016Gu21), the authors reanalyzed the data and emphasized that no statistically significant evidence of 7 H states is found.