

E03-101: GammaPP

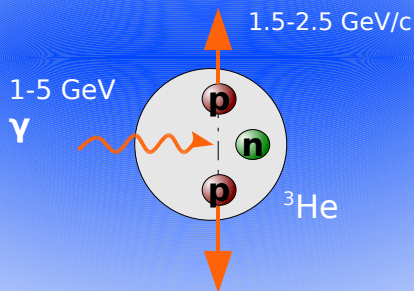
Hard Photodisintegration of a Proton Pair

Running June 2007 in JLab Hall A

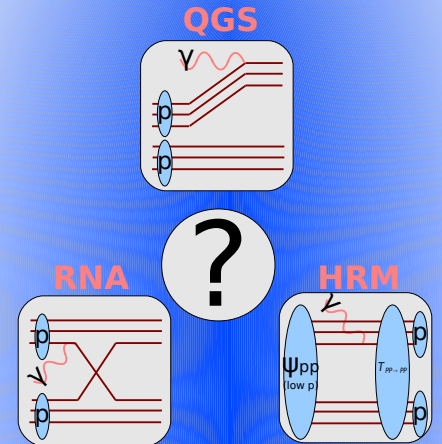
Ishay Pomerantz / Tel Aviv University

The reaction

$$\gamma^3\text{He} \rightarrow p(\text{high } p_t) + p(\text{high } p_t) + n(\text{slow})$$

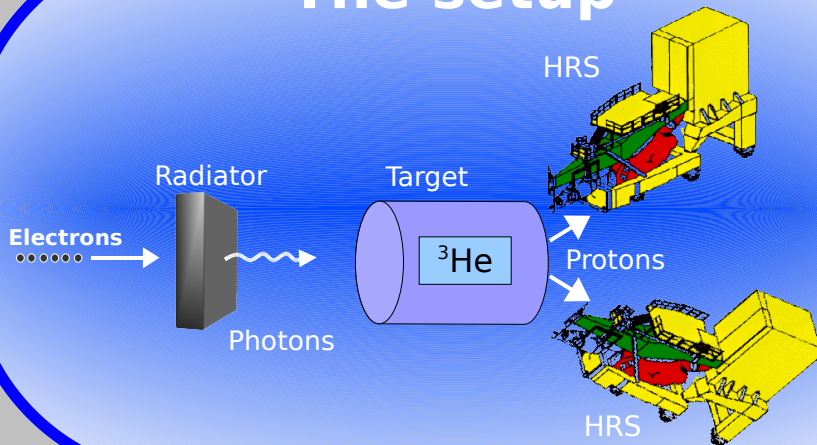


The Puzzle



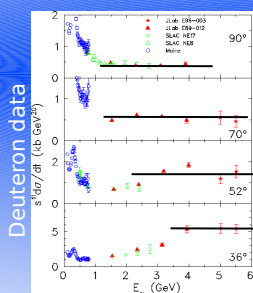
The two protons emerge with very large momentum in the transverse direction. How is this momentum acquired?

The setup

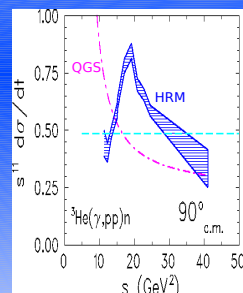


The clues

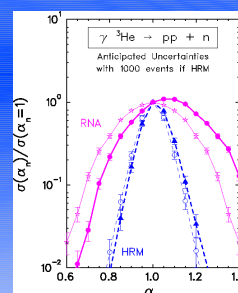
Scaling of the cross section with momentum transfer



The appearance of oscillations



Lightcone momentum distribution of the spectator Neutron



Polarization transfer

