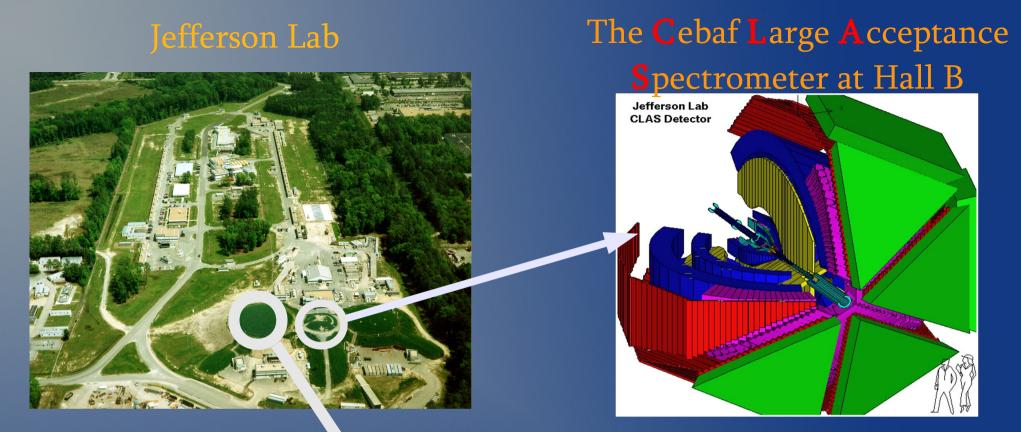
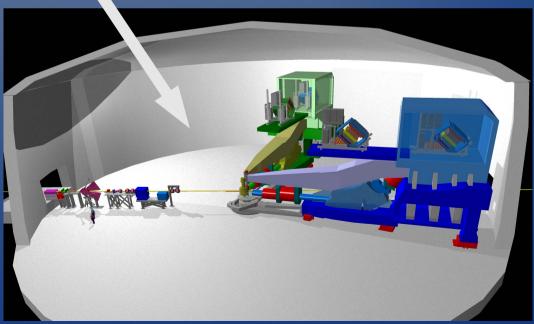
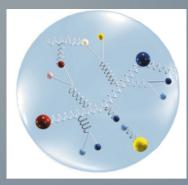




## Rafayel Paremuzyan Jefferson Lab group at Institut de Physique Nucléaire d'Orsay







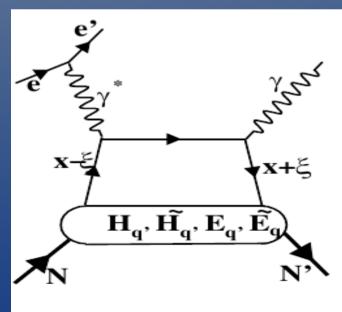
## Study of the nucleon structure

A recently developed formalism of Generalized Parton Distributions showed that a complete information about quarks and gluons in the nucleon can be obtaind through 4 GPD functions  $H\tilde{H}E\tilde{E}$ 

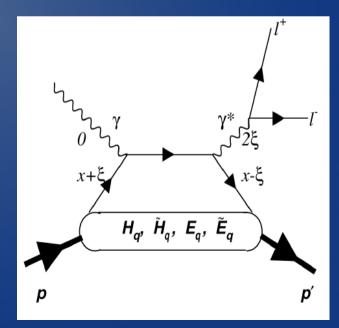


DVCS and TCS are processes where GPDs can be accessed more easily through the measuring cross-section and several types of asymmetries (beam spin, beam charge, target spin)

## DVCS



TCS



## I am currently working on:

- >TCS analysis of CLAS 6 GeV data
- >TCS proposal for CLAS 12 which shold be subitted in the PAC 38
- >GEANT4 simmulation for HALL A DVCS Calorimeter