#### Overview of LTCC

#### John Price California State University, Dominguez Hills



John Price

CLAS12 Workshop

## New mission for the CC

- CC currently used to detect electrons
- In CLAS12, many pions will be seen
  - Reason for HTCC
- $CC \rightarrow LTCC$ 
  - Useful in particle ID; 2.9-5 GeV
  - (LTCC) \* (not-HTCC) =  $\pi$



John Price

CLAS12 Workshop

### Task list

- Geometry changes
- Optimize for both charges
  - Need new mirror alignment
  - Simulation about to get underway
    - Computer cluster up and running as of Tuesday



John Price

CLAS12 Workshop

### CSUDH team

- Small. Really small.
- 1 faculty
- 2 undergraduates
  - Daniel Guzman graduating this year
  - Roger Newcomb graduating 2008
- Can probably use some help, at least initially (Zarecky, Vlassov?)

John Price

CLAS12 Workshop



# Immediate plans

- Simulate LTCC to optimize pion detection efficiency
- Will probably require adjusting mirror alignment
- Utilize new computer cluster at CSUDH; Hadronic Structure Lab
- Preliminary results expected in April

California State University

**Dominguez Hills** 

John Price

CLAS12 Workshop

#### Future work

- Upgrade cluster
- Look into relevance for 6 GeV
- Increase student pipeline

- Losing Guzman after summer 2007



John Price

CLAS12 Workshop