“Gap” Talk

- The following are plots from the LOI
  - questions were raised during DC/EC review
- Goal is
  - decide changes that should be included in proposal
  - identify who can/will do the work
Semi-Leptonic ($e^-$ from charm @ low-pt)

1) use Frawley luminosities
2) state pt range of D, given pt range of e from charm
3) currently for p+p, need to state Au+Au performance?
4) fold pt range back into x-range
5) statement of how this improves existing measurement

several other pt ranges
Semi-Leptonic ($\mu^-$ from charm)

Tasks
1) use Frawley luminosities
2) state pt range of D, given pt range of $\mu$ from charm
3) currently for p+p, need to state Au+Au performance?
4) $D^+ \bar{D} \rightarrow e+\mu$, benefit?
5) fold pt range back into x-range

$\mu$ within 1cm of collision
Semi-Leptonic ($e^-$ from beauty)

Tasks
1) use Frawley luminosities
2) state pt range of B, given pt range of $e$ from beauty
3) currently for p+p, need to state Au+Au performance?
4) fold pt range back into x-range

Aug 2003
Craig Ogilvie
Tasks
1) use realistic B and primary J/psi yields
2) use Frawley luminosities
3) currently for muons, what about central arms?
4) fold pt range back into x-range
gamma+jet

I don’t have any plots :( 

1) documentation and performance of jet-angle algorithm 
2) how much does this help determination of x-range? 
   - c.f. gamma by itself
Backups
electrons from non-photonic sources in min. bias Au+Au collisions

PHENIX preliminary

\( (e^+ + e^-)/2 @ \sqrt{s_{NN}} = 200 \text{ GeV} \)

\( (e^+ + e^-)/2 @ \sqrt{s_{NN}} = 130 \text{ GeV} \)

(PHENIX: PRL 88(2002)192303)

\( \square \) sys. error @ \( \sqrt{s_{NN}} = 200 \text{ GeV} \)

PYTHIA: pp @ \( \sqrt{s} = 130/200 \text{ GeV} \)

\( (e^+ + e^-)/2 \) from charm with binary scaling from pp to Au+Au
Electron pt Spectra from D

electrons from D pt=4.0-4.4 GeV
electrons from D pt=2.4-2.8 GeV
electrons from D pt=0.8-1.2 GeV