

## Draft Agenda for Simulation workshop 8<sup>th</sup> and 9<sup>th</sup> of October

Monday 8<sup>th</sup> of October 2012

Session-I: 9:00 - 12:00 one coffee-break in the middle

1. Welcome Talk describing the goal of the workshop
2. The EIC physics program what is in the White Paper
3. Talks (3 or 4) on the Golden Measurements to benchmark detector performances
  - a. How well can we reconstruct the scattered lepton and  $F_2$  and  $F_L$ 
    - i. Rad-corrections, unfolding and limits from systematics
    - b. DVCS and other exclusive reactions
  - c. Semi-inclusive reactions → Kaon asymmetries, Kaon cross sections

Session-II: 14:00-17:00 one coffee-break in the middle

1. What software is existing
  - a. BNL:
    - i. Physics generators /ROOT-trees & Smearing code
    - ii. Detector simulation software fairroot
    - iii. Tom's program
2. What environment is existing
  - a. at BNL →
  - b. at JLab →
3. Discussion on software standards and computer environment

Tuesday 9<sup>th</sup> of October 2012

Session-III: 9:00 - 11:00 coffee-break at the end

1. What Calorimeter concepts and simulation tools exist
2. What tracking and PID concepts and simulation tools exist
3. What Magnet concepts and simulation tools exist

Session-IV: 11:00 - 15:00 one coffee-break in the middle and lunch break

1. Detector integration into IR design
  - a. At eRHIC → CAD person
  - b. At MEIC/ELIC →
  - c. Particle tracking through IR @ BNL
  - d. Particle tracking through IR @ MEIC/ELIC
2. Machine background influencing detector performance
  - i. Synchrotron radiation
  - ii. Neutron background
  - iii. Electron and hadron beam induced background, i.e. beam gas events
    - a. Hera experience → Ferdi Willeke or other HERA machine person
    - b. At eRHIC → CAD person
    - c. At MEIC/ELIC →
3. Discussion how can machine backgrounds most efficiently be integrated in detector simulation
4. Discussion on how to go forward