Discussion - Big Picture

- What is the mechanism for energy loss
  - Weak coupling (most calculations)
  - Strong coupling

    ➡ AdS/CFT

    ➡ Dima's mechanism

    ➡ ?

- If we can't rule out strong coupling experimentally, are we focusing on the wrong problem?
  - i.e. shouldn't we first figure out if energy loss is weakly or strongly coupled?

Discussion - Big Picture

- Jet measurements forthcoming from RHIC and LHC experiments
  - Providing a qualitative change in experimental information on quenching.
  - But also new challenges for theory
- In last year, new trend towards parton shower calculations.
  - Essential for high energy jets
  - Also potentially helpful in addressing limitations of existing calculations.

➡ Important that we not lose contact with analytic theory (where it's right)

Discussion - The Brick

- Brick was intended to help identify and understand differences in the formalisms
- Issues identified
  - Low x differences between WHDG, ASW
  - Behavior at large x
    - ➡ Energy conservation in dN_G/dx
    - ➡ Energy conservation in Poisson convol.
    - ➡ Explicit small-x approximations
  - But we already knew these (I think).
- Need to do more complete comparisons.
  - Results must be made available as data

Brick - Issues

- Evolved FF formalisms
  - Only solution to compare modified FF?
- Parton shower calculations
  - Can we compare WHDG, ASW, HT to parton-level results from parton shower calculations?

➡ Focus on large-z behavior?

➡ Importance of virtuality evolution?

- Comparisons of modified FF

➡ Not the focus of the original brick problem but should we re-think?