Bosted Model and SAMC

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IDEA

- Use single-arm Monte-Carlo (SAMC) to generate nitrogen XS
  - Use Bosted ’09 as XS model
  - SAMC from Vince/set-up for SAGDH experimental conditions
  - SAGDH kinematics:
    - 6°/2135 MeV
    - 6°/2845 MeV
    - 9°/1147 MeV
    - 9°/2234 MeV
    - 9°/3319 MeV

- SAMC can include energy loss corrections/inelastic radiative corrections
  - Inelastic radiative corrections only

- **Pro:** Should be best comparison between Bosted model and SAGDH nitrogen XS’s
  - Need to see *how much* better it is

- **Con:** Radiative corrections take a *long* time to run
Checklist/To-Do

✓ Get SAMC running
  ✓ Still need to get it running on UNH farm to do complete radiative corrections
• Compare Bosted XS from SAMC and my method of average XS over acceptance (without RC)
• Compare SAMC RC to my method of RC
  – Including looking into energy loss procedure in SAMC
• Compare results from 2.1 GeV/6 deg between SAMC and my previous method before proceeding