d(e,e'p) FSI Studies

Kinematics

p_{m} (MeV/c)	θ_{nq} (deg)	k_{f} (GeV/c)	θ_e (deg)	p_{f} (GeV/c)	θ_p (deg)
500	70	8.151	13.14	3.069	44.17
800	49	8.551	12.82	2.468	54.85
	60	8.151	13.14	2.891	49.27
	72	7.552	13.65	3.516	41.57

Table 1: Central spectrometer kinematics coverage for an incident electron beam energy of $E_b = 10.55$ GeV and Q^2=4.5 $(\mathrm{GeV}/c)^2$.

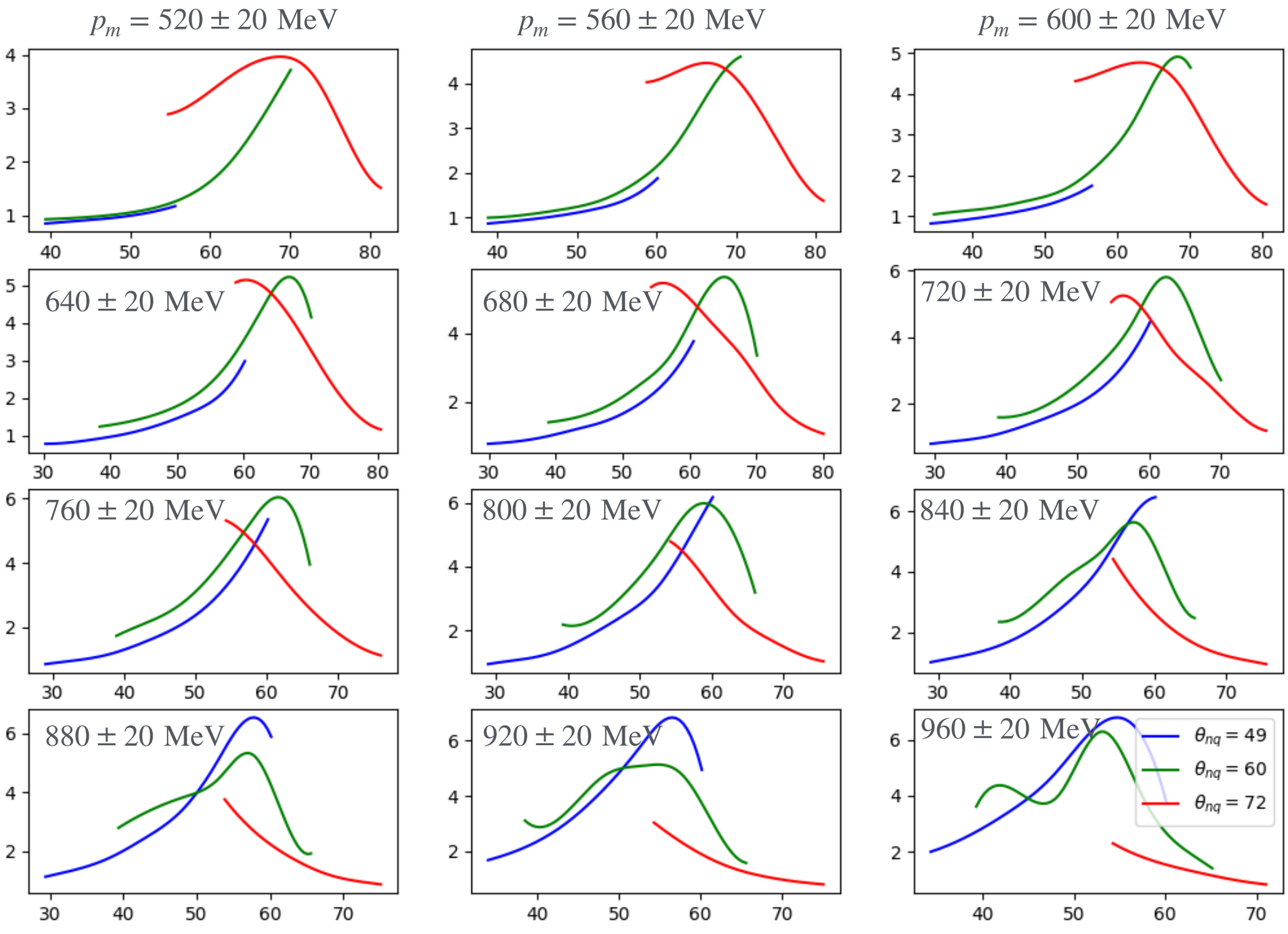
Discussion Points for Meeting

- Discuss theory calculations of d(e,e'p) from Misak
  - why is there a discontinuity in the calculations for pm=800 MeV/c at theta_rq = 49, 60, 72 deg ? for both the CD-Bonn / AV18 ? (See next slides)
  - Current calculations of FSI/PWIA are non-relativistic any updates on relativistic FSI calculations ?

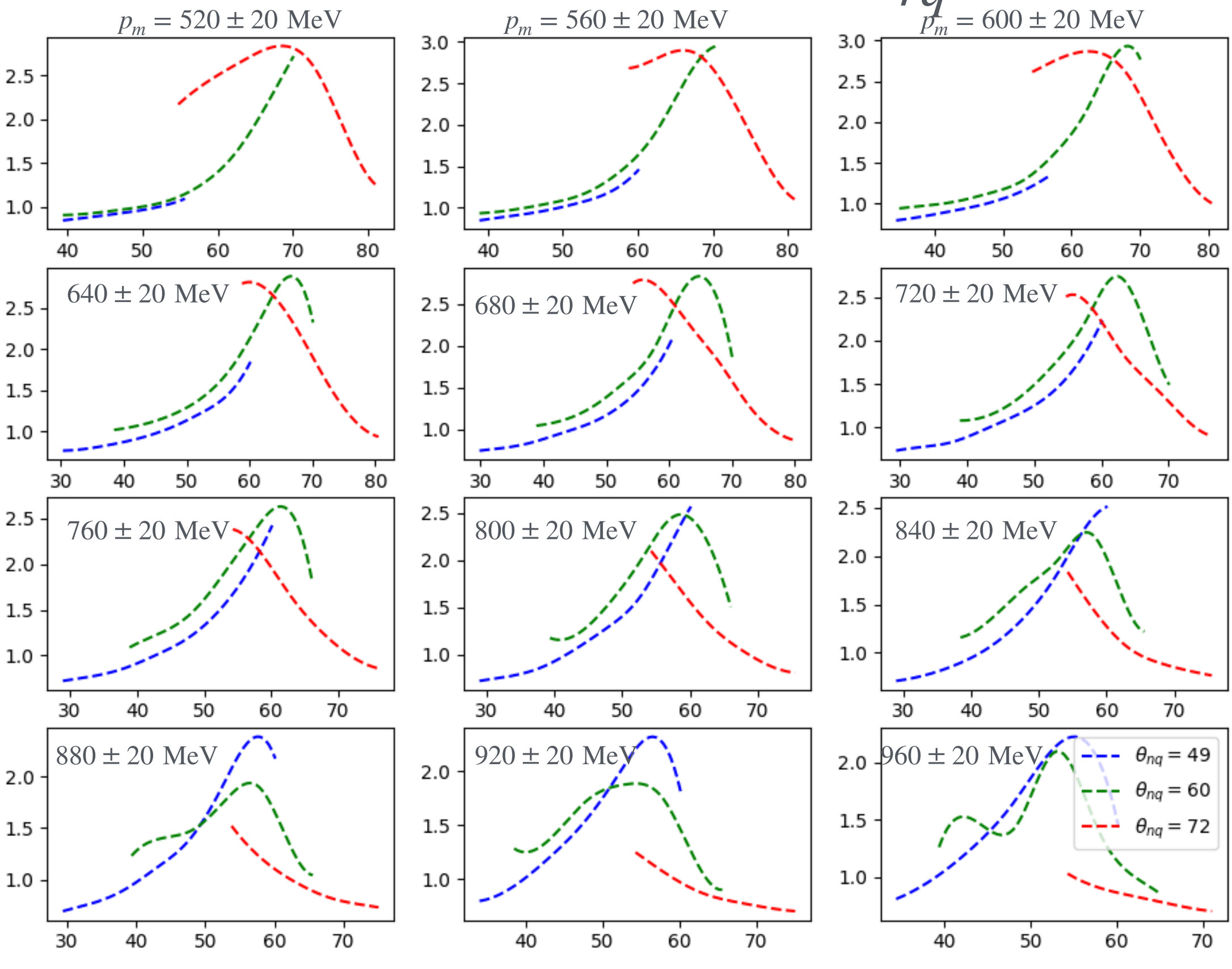
- Updates needed to PAC 53 (mostly minor modifications)
  - Perhaps add a "Theory" section for Misak to add a few lines on the current status of the deuteron

- Response to PAC 52 members
  - Last year we presented an LOI for this experiment which received some comments from some members which were answered (should part of our response be included in the full proposal ?)
  - Would our response to PAC52 be transferred to PAC53 such they don't end up asking the same questions ?

CD-Bonn FSI/PWIA vs. θ_{rq}

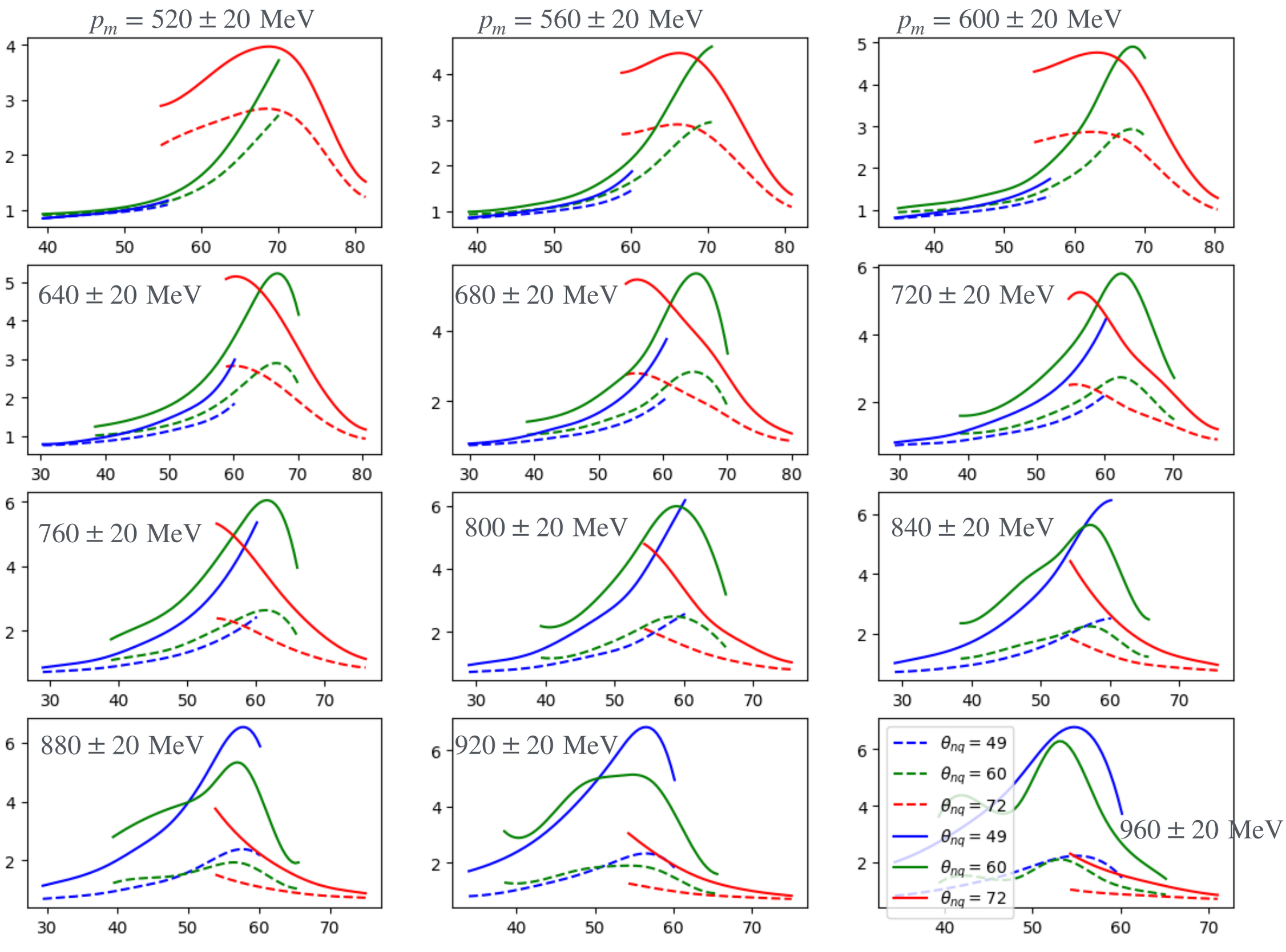


AV18 FSI/PWIA vs. θ_{rq}



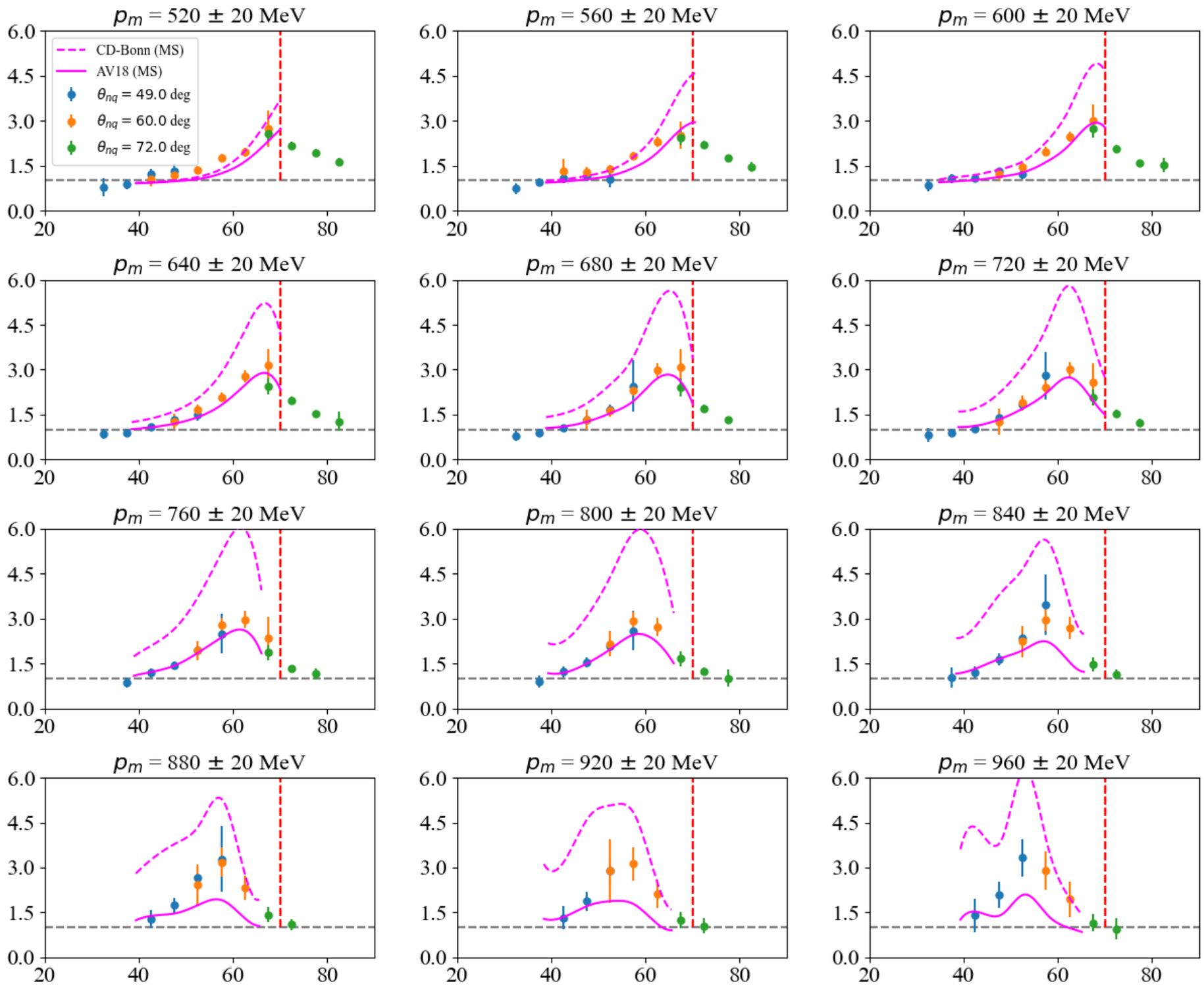
CD-Bonn (solid), AV18 (dashed)

FSI/PWIA vs. θ_{rq}



SIMC (Paris, 'data' points) overlay w/ AV-18 (SOLID) + and CD-Bonn (dashed)

FSI/PWIA vs. θ_{rq}



- SIMC: 3 central θ_{rq} = **49**, **60**, **72**, AV18/CD Bonn (**ONLY** $\theta_{rq} = 60°$)

FSI / PWIA vs. θ_{rq}

AV18 (MS)

CD-Bonn (MS)

Paris (JML)