Discussion Topics for Session 40

1) How do the new 4-quark and 5-quark states intermingle with the conventional quark-model spectrum of excited states (some have the same $J^{PC}$ and might mix, some are clearly exotic)? Will hybrids need to be included as well?

2) There is mounting experimental evidence for compact multiquark states built from diquarks, while others seem to work much better as hadron molecules. How much do these structures mix?

3) Have we exercised, to full extent, the information on how hadron spectra evolve with the mass of valence quarks? What features of heavy-quark exotics persist for light-quark exotics?

4) Lattice QCD and phenomenological models have different ranges of applicability and make different assumptions. How can their respective results be combined in the best way to achieve the greatest utility?

5) Is the division in the US between “nuclear physics” and “particle physics” hampering progress in studies of exotic hadrons (collaborations, funding)? If so, what are the remedies?

6) Are there areas in which it would be beneficial to include lower-energy experimentalists or theorists to share expertise with particular high-energy experiments? What would be the mechanism?