Q1

◆ Has anything struck the audience as being a solved problem ?

   ▪ transient stability ?

Q2

◆ Has anything struck the audience as an unexpected result ?

- long time scale, sustained index heating and loss
- path from material database to "as built" properties not completely understood
  - conduction in components (interface resistances ?)
  - strand to cable to coil characterization (Nb3Sn/NbTi)
- HTS engineering database
- what is the meaning of "n" in strand/cables/magnets
  - definition, dependences on (B, T, E, …)
- slow heat removal in parallel channels – is this a problem ?

Q3a

◆ In what area is modeling lagging behind the experiments ?

- integrated models for
  - EM/TH + Mechanical
  - cable/conductor
- mechanical models of cables
- coil manufacturing process
  - e.g. impregnation (thermal model)
- exploit better/more existing models, explore different regimes
  - heat transfer with parallel channels
  - dependence of stability on flow velocity

Q3b

◆ Which *useful* models need validation ?

- mechanical behaviour of cables and strands in cables
- Electro-dynamic characterization of cable

Q4

◆ Suggestions/reactions/comments to the total modeling idea ?

- mechanical/thermal/hydraulic/electric/magnetic
- work is already in this direction
- time scale ???

Q5

◆ Is there an adequate engineering database for HTS materials ?

Q6

◆In what direction should CHATS move ?
- expand scope
- integrated modelling