

Specific guidelines for the following presentations:

Challenges for future cryogenic electronics

Challenges for future rad hard electronics

Challenges for future space qualified electronics

Challenges for future experiment on chip electronics

The main thread of these topics is that vendor models may not adequately describe the device behavior. The main questions to be addressed are therefore:

Why not and will they ever?

How badly is the response we care about mismodelled (for which processes)?

What characterization work can we expect will be done by others? Who? For which processes?

What additional work should be done in the US? For which processes? Why those processes?

What effort, time, and facilities would be required to perform the needed characterization?

Do NOT address specific applications that require meeting these challenges- this will come out of separate physics requirements presentations. Focus only on the particular challenge and the possible solutions.