

# Charge Questions for IB Panel



- 1) Are technical risks, challenges, and potential roadblocks sufficiently identified? Are testing and design flexibility applied appropriately to mitigate risks?
- 2) Does the timeline fit within reasonable expectations? The commissioning timeline is beginning to take shape and will need to remain flexible to accommodate delays.
- 3) Are interfaces sufficiently specified and information being shared between component teams? We want to eliminate unnecessary redundancy and make sure there are no unintended consequences that affect multiple components.
- 4) Are students and postdocs being fully utilized? Are there opportunities for growth and leadership?
- 5) Any potential showstoppers or large omissions in design or testing considerations?

# Meeting Takeaways and Concerns



- DMRadio website will point to KDI's Stanford page for now
- Radiative loading tabulation? Gradients are most important. To-do: Full Raleigh-Jeans tail calculation
- Need to propose final cryo design to 4-9 by July 15th
- $g_{agg} \sim T^{1/4}$ , scan rate  $\sim T$
- Vibration mitigations? Need to leave flexibility in design for each vibration sensitive component. Mitigate at commissioning
- Clearances? Warping and thermal contractions might affect tolerances. Touch sensors?
- Magnet leads lengths and materials need to freeze soon. 4K design to be matured before.
- Pre-stretch kevlar strap before installation
- 200lbs magnet only being held by  $\sim 30$ lbs of tension seems marginal. Investigate possibility of higher tensions with just kevlar banding?
- SSI copper cage around magnet needs to go
- Need new cradle design for 4K magnet design choice. CAD expected by end of week.
- Assembly concerns of sheath and cradle (4K vs 1K design)
- Electrical isolation with 60um of kapton may be an issue.

# Feedback from IB Panel



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