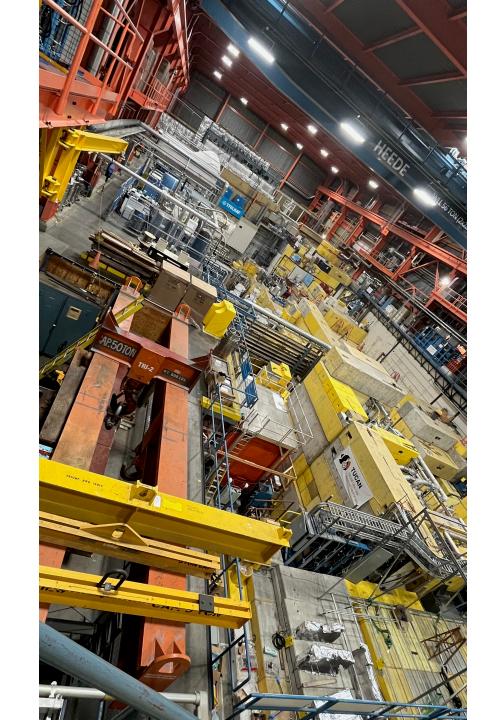


# **Update on DBD Joint Oversight Group**

Xenon Worksop, McGill

**November 13th, 2025** 





# First JOG Meeting - Heidelberg (3rd Summit)

## Statement from first JOG meeting (1)

The international funding agencies and laboratory directors who attended the 3rd International Summit on Double Beta Decay (the stakeholders) re-affirmed that the science of neutrino-less double-beta decay remains one of the most compelling and important in contemporary physics. The summit meeting summarised the state of the field, including recent developments in different technologies. The stakeholders congratulate the double-beta community for the substantial progress made since the last summit meeting, in a resource restricted environment.

The stakeholders recognise that the best chance for an unambiguous discovery is an international campaign with multiple isotopes and more than one large tonnescale experiment implemented in the next decade. Following the 2nd International Summit, a Working Group was struck and charged with exploring possible governance structures to support this objective. The Working Group reported back at this meeting, with a recommendation for a 'hybrid' governance structure to retain flexibility, agility and a forum for maximising impact of available funding.

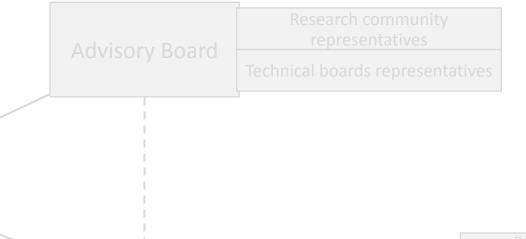
### Statement from first JOG meeting (2)

The stakeholders endorse the recommendation of the Working Group, whilst recognising the change in funding environment since the previous summit. It was agreed that the intention is to phase the development of the hybrid governance model. Phase-I is the formation of an initial Joint Oversight Group comprised of interested funding agency representatives and facility directors to ensure a forum for communication and discussion, and, if applicable, coordination by the funding agencies, for deployment of tonne-scale detectors in North America and Europe.

The 3rd Summit meeting closed session on Day 2 was viewed as the initial JOG kick-off meeting where the funding agencies and laboratory directors met under the umbrella of the JOG to discuss the terms of reference and operational mode.

### **Joint Oversight Group - Phase 1**

Initially, the JOG would be the primary forum for convening funders and facility directors, with responsibilities as previously described and establishing a timeline for filling out the hybrid organization.





JOG has been struck

Funding agencies

Facility directors

Nigel Smith has been appointed as interim chair

Expanded Working Group will carry forward governance structure within six months Interested agencies should connect the JOG through the interim chair

Joint Oversight

Group

## **Next Steps...**

- Chair of JOG appointed (NJTS), Paul Mantica (DOE) continues as secretary
- Initiated meeting sequence second JOG meeting held in September across two meetings
  - Recognition of changed funding environment
  - Discussion of role of JOG in this environment, what can realistically be done with available resources? Information sharing, advocacy within agencies
  - Recognition a fuller understanding of the experiment strategies, facility capabilities required to support agency understanding
- Work now underway to develop charter for JOG, including objectives and terms of reference: formal rules for inclusion, cadence, lines of authority, roles and responsibilities
- Define evolution pathway for governance model (when to introduce different components outlined by working group, etc)
- There was discussion about the 'O' in JOG, when there is really nothing to oversee at the moment (projects are running as projects). May get changed to 'Advocacy'

## Membership of JOG

- Nigel Smith (TRIUMF, Canada) Convenor
- Paul Mantica (DOE, US) Secretary
- Nathalie Besson (CAE, France) Volunteer
- Graham Blair (STFR UKRI, UK) Volunteer
- Jodi Cooley (SNOLAB, Canada) Volunteer
- Marcella Grasso (IN2P3, France) Volunteer
- Oliviero Cremonesi (INFN, Italy) Volunteer
- Olivier Gagnon (CFI, Canada) Volunteer
- Carlos Pena Garay (LSC, Spain) Volunteer
- Jaret Heise (SURF, USA) Volunteer

- Pilar Hernandez (CSIC, Spain) Volunteer
- Milan Konopek (ISED, Canada) Volunteer
- Bogdan Mihaila (NSF, US) Volunteer
- Allena Opper (NSF, US) Volunteer
- Sarah Overington (NSERC, Canada) Volunteer
- Sean Paling (Boulby, UK) Volunteer
- Ezio Previtali (LNGS, Italy) Volunteer
- Maryam Rana (ISED, Canada) Volunteer
- Jacek Swiebodzinski (PT.DESY, Germany)
  Volunteer
- Paul Sorensen (DOE, US) Volunteer

# Some Personal Comments re Xenon

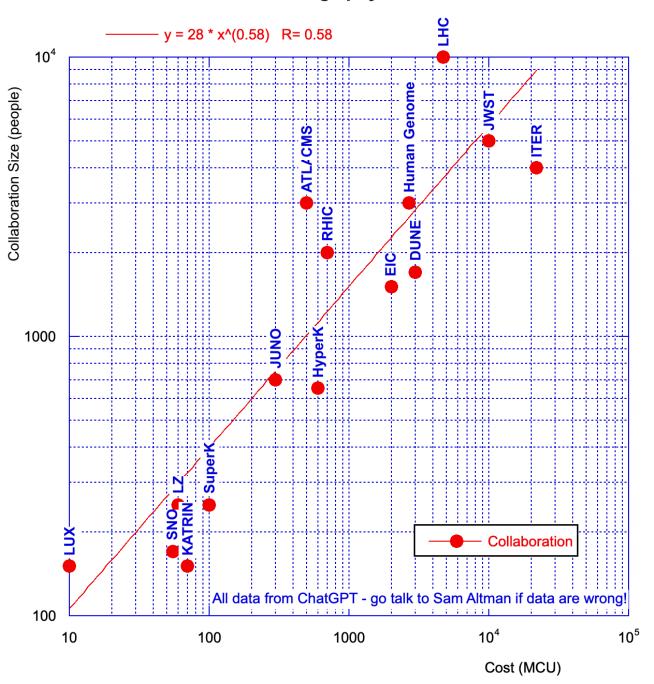
### Role of the JOG

- The funding environment has changed even since the 3rd Summit, making resources even tighter with national alignments evolving
  - This is a threat and an opportunity
- I think it's clear that for the time being, the JOG will be:
  - primarily information gathering and exchange, informing the funding agencies about possible pathways
  - advocating where possible (esp. within national agencies) for DBD
  - potential advice on non-agency approaches possible
- The xenon community can use the JOG as another information and influence route to the agencies... noting that influence may be needed at a higher level in some countries (ie Canada)

# Resources vs collaboration

- Next generation experiments require additional scientific and technical input...
   but funding ceilings are a key issue
- At the 300MCU level, historical projects need about 600 collaborators
- What's the possible scale of our community(ies)? Effectively defines the number of projects that may occur (cf Roxanne's slide)
- External shocks or constraints are why coalescence occurs
- 'Snowball' effect needed, with a precipitating event to start the process, or transition to 'strategic reserve' argument

#### Cost vs Scale of large physics collaborations



### Tuckman's Ladder of team development

- This morning's talks by Jocelyn and Kim describing the merging of collaborations followed Tuckman's ladder for the development of a team
  - **forming**: recognise the opportunity, discuss challenges, members acting somewhat independently, define rules of engagement. Discussion focuses on the scope of the task, and ways to approach it...
  - **storming**: development of trust through resolving conflicts, assigning responsibilities, resolving personality clashes, developing leadership structures. Discussion focusses on team behaviours
  - **norming**: team alignment on the success of the programme, full information sharing, team members become knowledgeable, team is now operating 'comfortably', discussion on modus operandi
  - performing: getting the job done, all members motivated, competent, autonomous, knowledgable
- First potential step for xenon DBD collaboration articulate and sign-off on the scope of the broader collaboration, recognising that the DM communities had momentum of running experiments and a clear next objective of the neutrino fog
  - What is the objective of xenon collaboration? Short/medium/long term? Technology, procurement and process development? R&D towards new techniques? Coalescence with DM xenon community?

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# Thank You Merci Hay ce:p qa

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