

CE23 EOI m2

Meeting 5/3/21

In attendance:

1. Paul J
2. James Z
3. Jacinda G
4. Cedric S
5. Joe H
6. Simon H
7. Ulrik E
8. Kevin V
9. Michael S
10. Martin S
11. Matt D
12. Archil K
13. Magdalena Z

Next meeting: ~3 weeks

Action list:

Action	Who?
Circulate a CV template	PJ
Circulate slides from DVCR pitch	PJ
One paragraph summary statement containing a vision for the centre (the science case). Circulate at least a day before next meeting	all
Potential node leaders	Each node to discuss internally before next meeting

Discussion:

Jack's presentation - see slides

Initial comments

UE:

- Don't start with science cases for individual projects and try to glue them together
- Start with the bigger picture idea and work down

JH:

- Agree
- Process to come up with a vision in a group usually fails
- Need a compact view of the science cases then individually pitch top-down visions
- Compare stories and converge on message

PJ:

- This provides us with some homework before next meeting

AK:

- Two communities here - should be advertised as a strength
- Coming up with the common idea very important for these two communities
- (PJ) - at least 2. But yes, PP community (for e.g.) could come up with a joint goal
- Look past tools as the way to separate communities, focus on physics

CIs (slide 7):

- Should be close the final list of CIs should we get past EOI (only change by 1 or 2 at most)

MS/MD:

- Nicole still interested, but depends on scope of centre.
- Ray definitely

KV:

- BY would be great to have as a CI
- But job security an issue. A problem for USyd to work out
- Perhaps not a problem at EOI

UE:

- Jordan is very keen if COMET can be included
- But he is time-limited so won't be upset if can't be involved
- Dean role is initially for 5 years, but beyond that no-one can say

JH:

- Looking at top-down idea, our work not obviously part of centre's scope

- Original idea around EDM project (spans particle to atomic)
- All communities large hence big decision to be made on scope of centre
- Need a process for deciding as we need to shrink
- Our stuff will take up space so comfortable if centre is more PP-based in which case happy to step back

CS:

- PP-focused centre dangerous. Already a centre on this (CDMPP)
- CoEPP3 not likely to succeed
- MD points out that many similar-looking centres funded under Quantum banner
- AK points out opportunities in JH-type physics. Centre should blend QP into centre and work together under the umbrella of centre.
- PJ agrees that CoEPP3 would be collider-focused and not likely to succeed. Bringing communities together to address the bigger problem looks stronger
- AK adds that QP problems are addressing problems at a small scale that impacts collider physics
- JH - balance of CIs needs to change if a broad centre is to succeed
- JG - currently only atomic person. Nuclear side could expand. Quantum Chemistry would present opportunity to add more women (Anastasia Borschevsky) keen to relocate to Australia). Nanda? CS-not likely

MSev:

- Attracted to proposal because BSM physics can be explored through many different avenues
- Personal interest in PP anomalies
- Like the idea of tying this to precision atomic measurements

AK:

- EDM by itself cannot be a vision
- CP violation is the bigger picture and encapsulates many processes
- Need to agree on the themes. Everything else are tools

SH:

- Support for JH message - everyone put together their own ideas for pitches and then bring them together for a bigger vision

PJ:

- Before next meeting, everyone needs to provide a one paragraph pitch on the vision, not everyone's favourite tools
- After this, CI list will become clearer
- Try to avoid promoting your own research area, look at what is the common goal
- Potential for adding Adelaide table-top atomic parity violation experiment

- But adding CIs means others need to drop off - need to think hard about this. Unavoidable
- JZ - take a look at input already received to date

UE:

- What can we do in this centre that we can't do in 6-10 DPs
- Needs to be upfront
- What we will we do? What will the centre enable that wouldn't be possible otherwise in Australia?
- What is the ATLAS component in CDMPP? PJ - not much. What's there is very specific on DM analysis

PJ (slide 15 - synergies):

- Might seem heavily weighted to PP collider, but just represents people at the moment
- Doesn't capture what centre might eventually look like

JH:

- Experience says that once we pick a team and choose a direction, links are made very quickly
- Have confidence this will go well here
- Process for team
 - After settle on vision
 - Jack be king and make a call
 - Choose a tight team to fill in gaps
 - Those on the outside, just accept this. Cant' be too big. We need to shrink
 - Diversity of nodes/people important
 - Personally fine if decided to be excluded, but keen to be involved
- PJ expresses discomfort with this but agrees decisions by committee difficult.

CS:

- Eventually someone needs to make a call.
- Other centres who don't even yet have director, but have a small committee (~5) tasked with reducing a very large list of CIs
- Suggest a small committee here to do this
- PJ doesn't want a top-down approach. Would prefer decision by consensus of a small group of people

UE:

- Need to ensure that it is an open process
- Historically decisions have been made by a privileged few in the field in Aus that has created issues
- Would prefer final decision to be made by PJ rather than "a chosen few"
- PJ still uncomfortable. Wants process to be inclusive

JG:

- Wants to assure all that she is excited by the physics and people represented here
- “Digital Child” centre had 25 CIs. What is the max?
- PJ - centres exist with up to 28. But becomes a numbers game. Number should purely be based on presenting the best case. Still needs to have a concise/coherent message

MD:

- Top-down/CI selection eventually might have to come down to PJ
- Communication important to avoid conflicts/greivances
- JH: agree. We only want to be in a centre that is functional

KV:

- Observation (but not as an elder statesman :-)
- Optimistic about what has been discussed so far. Very happy with the tone of the discussion. All very positive and bodes well for the future

PIs:

- PJ - maybe not ideal to discuss at this stage
- As we bring our thoughts together on the direction of the centre, also think about name of potential PIs
- Send suggestions to PJ

Leadership roles (slide 9):

- Node leaders? Think about this. Think at a group level on how they would like to be represented
- Theme leaders - just some ideas. Please comment/make suggestions

Deputy Director (slide 11):

- PJ's thoughts on slide
- Preference for a “senior figure” plus a mid-career
- Balance across country, gender, etc
- Don't oversubscribe an individual to too many roles (personal input/preferences to decide)
- PJ has put forward suggestions, others to add to this
- Cedric checking if a DD can be in two centres
- CS:
 - Director gives direction, DDs give momentum, ensure people move in the right direction
- MSev:
 - EoIs in Melb due 31/3

- Will check if this also applies to us (No! Turns out this is just for Melb-led centres)
- PJ
 - Can everyone please check deadlines for their own institution
- AK
 - Chance to promote gender balance (Jacinda)
 - Also other candidates (Nicole B, Seline, ..)
 - PJ - Seline DD on other CoE bid
 - “Junior” people in Melb (MSev agrees :)
- PJ
 - Suggestions need to be strategic but also suited and have the track-record to back it
 - If someone puts their hand up for a role, should look to support it
 - Balance of junior/senior people in roles would look good
- JH
 - Need to make sure of a minimum bar of “plumage” for these roles

The “7” (slide 12):

- PJ
 - This will probably need to wait until after direction/CI discussion evolves
 - Balance of nodes, theory/experiment, gender
 - Two potential PIs listed (Phiala Shanahan and Val Gibson)
 - Experimental list currently collider heavy - something to address?
- MSev
 - Would be great to have an Aus experimental program
 - Who should we approach?
- JG
 - Natural to include Andre Luiten’s group
 - Atomic parity violation exp in Adelaide
 - Can go beyond fundamental symmetries and look at clocks (Reubidium atomic clock) - big translation case if we make full proposal stage
- PJ
 - Discussed this already at UA
 - Would add plumage to include Andre + team
 - Expect he would be keen and has recognised he would not be coming in to take over
 - However 6 white males as CIs from UA not great
 - Would AL then be suitable for a member of “the 7”? Would mean 2 from UA. Problem?
- MSev
 - JH raised interesting question on Quantum Gravity. Experiments in Aus?
- JH
 - Exp not possible.
 - Interferometry which is why JClose is currently included in potential CI list
 - If decide to include, will lead to a natural list of great PIs
- AK
 - Goal for a lab to host future exp
- PJ
 - Any overlap with UWA group? Is in CDMPP
- SH/JH
 - Opto-mechanics might align. Lots of expertise in Aus. In fact too much to bring in

- UE
 - Gudrun Hiller as a potential PI

Next meeting:

- Not too long (~ 3 weeks ?)
- Homework
 - think about the vision statement/opening paragraph of bid
- UE
 - Try to emphasise the connections. What brings us together?
 - Pinpoint individuals
- PJ
 - Agree. Needs to be overlap between the individual themes
 - Have proposed leaders of different areas. Could they think about the overlaps?
- MSev
 - Input from all? Or a smaller list?
- PJ
 - Smaller number of submissions preferred
 - Node representatives. Consult others at your node
 - Circulate at least a day before next meeting
 - Through this process, keep in mind a name for the centre
 - PJ will provide a CV template
 - PJ will also make slides of DVCR pitch available on indico agenda