The Melbourne Convention & Exhibition Centre is located in **Naarm**. This is the traditional lands (bold) of the **Wurundjeri and Boonwurrung** people.

Constellations from north-west Victoria, according to First Nations Astronomy

Consider **Paying the Rent**:
Grassroots initiative, Justice, truth, equality and liberation for First Nations people.

paytherent.net.au
WHAT IS MEANT BY DIVERSITY & INCLUSION?

- **Diversity**: the differences in gender, race, sexual orientation, socio-economic status, ability, religious belief.

- **Inclusion**: The actions we can make to ensure each difference is given an equal opportunity to do good Physics.

**Diversity: Our Demographics**
“WHO” IS BELLE II?

*Diversity & Inclusion at Belle II: LP 2023* SHANETTE.DELAMOTTE@ADELAIDE.EDU.AU

Belle II Experiment @belle2collab · 24/6/2021
Belle II@SuperKEKB has reached a new luminosity world record, 3.1 x 10^{34}/cm^2/sec, on 22nd June 2021. Stay tuned for more luminosity records as Belle II continues to integrate a large physics data sample.
ON NON-BINARY GENDERS IN THE COLLABORATION

• Membership system now allows non-binary gender selection. Default is “blank”.

• Following demographic plots group together “blank” (intentional or otherwise) and “Other” to protect identity.

• Encouraging use of pronouns in nametags at face-to-face meetings and introducing pronouns in slides

1. Nobody is required to “declare” their pronouns

2. Don’t question preference, make good-faith effort to use them
### Demographics: Gender of Collaborators by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>#People</th>
<th>%People (in Collab)</th>
<th>#Women</th>
<th>%Women (in Region)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>173</td>
<td>14.6</td>
<td>27</td>
<td>15.6</td>
</tr>
<tr>
<td>Asia (excl. Japan)</td>
<td>258</td>
<td>21.7</td>
<td>64</td>
<td>24.8</td>
</tr>
<tr>
<td>E.Europe</td>
<td>87</td>
<td>7.32</td>
<td>13</td>
<td>14.9</td>
</tr>
<tr>
<td>Med.</td>
<td>194</td>
<td>16.3</td>
<td>42</td>
<td>21.6</td>
</tr>
<tr>
<td>N.America</td>
<td>180</td>
<td>15.15</td>
<td>26</td>
<td>14.4</td>
</tr>
<tr>
<td>N.Europe</td>
<td>269</td>
<td>22.6</td>
<td>57</td>
<td>21.2</td>
</tr>
<tr>
<td>S.Hemi.</td>
<td>27</td>
<td>2.27</td>
<td>5</td>
<td>18.5</td>
</tr>
<tr>
<td><strong>TOT=1118</strong></td>
<td></td>
<td></td>
<td><strong>TOT=234</strong></td>
<td></td>
</tr>
</tbody>
</table>

Arrows indicate changes of > 1% since LP2021.

*Country list in back-up*
DEMOGRAPHICS: GENDER OF COLLABORATORS BY YEAR

- Women represent...
  - 2011: 12.2% of 467 members
  - 2022: 19.7% of 1188 members
  - +68 increase in collaborators and +33 increase in women, since LP2021
  - Extrapolate trend (linearly), 50% women in ~50 years!

*Large “unspecified” numbers pre-2017 due to older membership system*
DEMOGRAPHICS: GENDER OF COLLABORATORS BY POSITION

- “Leaky pipeline”
  or
- “propagating wave”?

<table>
<thead>
<tr>
<th>Category (JFY 2022)</th>
<th>#People (in Collab)</th>
<th>%Women (in Position)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1188</td>
<td>19.8</td>
</tr>
<tr>
<td>Undergrad.</td>
<td>92</td>
<td>28.3</td>
</tr>
<tr>
<td>PhD+MSc</td>
<td>398</td>
<td>26.6</td>
</tr>
<tr>
<td>Term-based</td>
<td>141</td>
<td>18.4</td>
</tr>
<tr>
<td>Permanent</td>
<td>330</td>
<td>13.9</td>
</tr>
<tr>
<td>Technical</td>
<td>227</td>
<td>13.2</td>
</tr>
</tbody>
</table>

* Choppy statistics due to small overall number of undergraduates in early years
* Error bars omitted for same reason
PARTICIPATION OF WOMEN IN LEADERSHIP

<table>
<thead>
<tr>
<th>Category (JFY 2022)</th>
<th>People (in Collab)</th>
<th>%People (in Involvement)</th>
<th>Women</th>
<th>%Women (in Involvement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Members</td>
<td>1188</td>
<td>100</td>
<td>234</td>
<td>19.8</td>
</tr>
<tr>
<td>Delivered Talk (External)</td>
<td>136</td>
<td>11.4</td>
<td>20</td>
<td>14.7</td>
</tr>
<tr>
<td>Delivered Talk (Internal)</td>
<td>86</td>
<td>7.24</td>
<td>9</td>
<td>10.5</td>
</tr>
<tr>
<td>Leadership : Senior</td>
<td>36</td>
<td>3.03</td>
<td>2</td>
<td>5.56</td>
</tr>
<tr>
<td>Leadership : All Roles</td>
<td>128</td>
<td>10.8</td>
<td>12</td>
<td>9.38</td>
</tr>
</tbody>
</table>

* Error bars omitted due to small samples
WHAT IS MEANT BY DIVERSITY & INCLUSION?

- **Diversity**: the differences in gender, race, sexual orientation, socio-economic status, ability, religious belief.

- **Inclusion**: The actions we can make to ensure each difference is given an equal opportunity to do good Physics.

**Inclusion: Our Efforts**
The Belle II collaboration is committed to fostering an open, diverse, and inclusive working environment that nurtures growth and development of all, and believes that an array of values, interests, experiences, and cultural viewpoints enriches our learning and our workplace. Thus, members shall not engage in violent, harassing, sexist, racist, or discriminatory behaviours.

- Promote inclusivity – Safe point of contact – Support marginalised groups
- Publicise equity events – Concerns treated in strictest confidence

“Our DIVERSITY OFFICERS

EMI KOU (IJCLAB, UNIVERSITE PARIS-SARCLAY), STEVE ROBERTSTON (UNIVERSITY OF ALBERTA), with their students (and Ernst Rutherford!)
DIVERSITY PARALLEL SESSIONS

- B2GM=Belle II General Meetings, held three times a year
- Parallel sessions act as forum for collaborators to voice concerns
- Discover new concerns:
  - Collaborators with food restrictions at KEK: Limited vegetarian options, difficulties in translating Japanese when looking for allergens.
  - Expectations of attendance at face-to-face meetings: Difficulty in obtaining Visas, institutes with smaller travel budgets,
  - Timezone struggles: Collaborators working in night hours to attend online meetings. Giving up on participating in meetings or taking responsibilities due to being in the “wrong” timezone.

DIVERSITY & INCLUSION AT BELLE II: LP 2023 SHANETTE.DELAMOTTE@ADELAIDE.EDU.AU

44th B2GM at KEK (13Feb-17Feb)

- Please be sure to prepare the pledge in advance for entering KEK

- Shuttle service from Tsukuba center to KEK
  https://indico.belle2.org/event/8084/page/90-shuttle-service-kek-tsukuba:
  *On your first day, please be sure to prepare pledge before arriving KEK, and when the bus is stopping at Gurd parking. Bus is waiting for you and take

- WIFI@KEK
  https://www2.kek.jp/uskek/eng/other/lan2.html

- KEK cafeteria and cafe are not open in the early morning and week-end.
- 20 vegetarian boxed lunch at KEK store during B2GM (13-17 Feb).
  It's first-come-first-served basis.
- Makinouchi-Bento box (500JPY) are available at cafeteria.
  You can buy at the counter with cash, and to go.
- Food truck, 17th 11:00-16:00, Between the cafeteria and the KEK Interna...
DEVELOPING DIVERSITY AND INCLUSION
“BEST PRACTICES” DOCUMENTS

- Recommendations for protection and sharing of personal information
- Recommendations for session chairs regarding usage of pronouns etc.
- Recommendations for ensuring equity in selection/appointment of leadership positions etc.
- Usage and protection of gender or other personal information, both within the collaboration and externally
- Usage of colour palettes in slides and papers (in the context of color blindness)
- Recommendations for speakers on how to advertise their pronouns

Need people-power to produce!
A NEW COLLABORATION SURVEY

2018 SURVEY

- Inspired by 2016 LHCb survey*
- Open for 6 months, with ~240 responses (~28% of collab at time)
- Results: an all-gender bathroom outside the control room!!
- Difficulties:
  - Getting enough student responses
  - Too long/too detail
  - Fears of identification based on demographic information
  - No Oceania!
  - Can we trust Google Forms???

NOW

- More focused:
  - Experience in Belle II Experience at KEK
  - Family and Dependents
  - Working environment
  - Impact of COVID and war in Ukraine on work and well-being
- Moved to “limesurvey.org”
- New difficulties:
  - Difference between country of origin and country of work, when identifying as a minority.
  - Low stats in some regions
  - Differences in expectations regarding non-binary gender across collaboration

*https://cds.cern.ch/record/2725828/files/ECGD_ICHEP_2020_v2.pdf

...HOWEVER, WITH INADEQUATE DATA COLLECTION AND ANALYSIS, PROGRESS TOWARDS EQUAL REPRESENTATION REMAINS SLOW”
Are you currently a caregiver to one or more dependent children?

- Yes: 23.0%
- No: 77.0%

- My dependents have a large influence on whether I can travel for work.

- Remote/hybrid meetings/conferences/workshops etc. have improved my accessibility to work due to my dependents.

Plot creation: Raynette van Tonder
THANK YOU!
TOWARDS EQUALITY, FOR HIGHER LUMINOSITY!

“...an array of values, interests, experiences, and cultural viewpoints enriches our learning”

Support for under-represented groups...

Leads to more diverse approaches in analysis...

And better Physics!
Mt. Tsukuba, partnered with Mt. Fuji as one of the two great mountains of Japan. Located not all that far away from the Belle II Experiment!
REGION DEFINITIONS

- **Asia (excl. Japan):** Armenia, China, India, Malaysia, Saudia Arabia, South Korea, Thailand, Viet Nam
- **Japan:** Japan
- **Eastern Europe:** Czechia, Poland, Russia, Slovenia, Ukraine
- **Mediterranean:** France, Israel, Italy, Spain, Turkey
- **North America:** Canada, Mexico, USA
- **North Europe:** Austria, Germany, Sweden
- **Southern Hemisphere:** Australia

These definitions follow what is made in a similar study by the ATLAS Experiment: See ATL-GEN-PUB-2016-001 https://cds.cern.ch/record/2202392?ln=en
Belle II presented two diversity and inclusion talks at ICHEP2020 - our first such talks!

- Hannah Wakeling "Diversity and Inclusion Activities in the Belle II Collaboration"
  Presentation: [https://indico.cern.ch/event/868940/contributions/3801008/](https://indico.cern.ch/event/868940/contributions/3801008/)
  Proceedings: [https://pos.sissa.it/390/976/pdf](https://pos.sissa.it/390/976/pdf)

- Shanette De La Motte "Diversity + Inclusion at Belle II"
  Presentation: [https://indico.cern.ch/event/868940/contributions/3801009/](https://indico.cern.ch/event/868940/contributions/3801009/)
  Proceedings: [https://pos.sissa.it/390/977/pdf](https://pos.sissa.it/390/977/pdf)
RESOURCES RECOMMENDATIONS:

- For more accessible colour schemes (such as the one used in this talk):
  - See “Set of colors that is unambiguous both to colorblinds and non-colorblinds”
    https://jfly.uni-koeln.de/color/

- For changing your primary development branch to “main”:
  - General Git repos: https://www.git-tower.com/learn/git/faq/git-rename-master-to-main/
BELLE II ON SOCIAL MEDIA

- 11th February: International Day of Women and Girls in Science
- 8th March: International Women’s Day
- 21st March: International Day for the Elimination of Racial Discrimination
- 6th September: Colo(u)r Blindness Awareness Day
- International Day of LGBTQ+ People in Science Technology Engineering and Mathematics

DIVERSITY & INCLUSION AT BELLE II: LP 2023 SHANETTE.DELAMOTTE@ADELAIDE.EDU.AU