UWA Master of Physics (Astronomy and Astrophysics)
Intro session to 2022 degree

Luca Cortese (he/his/him)
Chair of ICRAR Graduate Program
Kaya! Hello! Welcome!

Wandjoo!

We acknowledge that Aboriginal and Torres Strait Islander people are Australia’s first astronomers.

We acknowledge their long-standing systems of knowledge on which we continue to build and we acknowledge the Traditional Custodians of the unceded lands on which we are meeting today.

We are on Wajuk Noongar boodja, Wajuk Noongar country, and we pay our respects to their Elders past and present, and extend that respect to all First Peoples joining us here today.

We acknowledge the Wajarri Yamatji as the traditional owners of the Murchison Radio-astronomy Observatory site.
Welcome to the University of Western Australia
Housekeeping

Hybrid format: face-to-face and webinar simultaneously

On-line participants
- Make sure you are muted
- Post questions using Q&A function at any time

In person participants
- Feel free to ask questions at any time

Presenters
- Stay close to the computer
- Please repeat questions from the audience

This session is being recorded
Unanswered questions will be addressed via email after the event

Closed captioning is available in English.
Astronomy & Astrophysics in Western Australia

Significant growth (investment and people!) in the astronomy sector in WA in the last ~15 years

Roughly one third of the Australian astronomy community is now based in WA
The Square Kilometre Array
Astronomy & Astrophysics at UWA

The International Centre for Radio Astronomy Research

Department of Physics

The gas cycle of galaxies in the local Universe

The evolution of mass and structure across time

Cosmological Theory

Gravitational Wave Astronomy

Multimessenger Astronomy

Astrophotonics

Well above world standard!

Australian Government
Australian Research Council
ERA2018
0201 Astronomical and Space Sciences

$60M investment in Astronomy
Master of Physics (Astronomy and Astrophysics)

Advanced Coursework Units

- Galaxies and Galactic Dynamics
- Radio Astronomy and the Interstellar Medium
- Gravitational Wave and Multi-messenger Astronomy
- Cosmological Physics
- Computational Statistics for Physics
- and more...!

Transferrable skills!

- PhD @UWA: 37%
- Left Academia: 33% (e.g., Government/Consulting/Risk Management/Education)
- PhD outside UWA: 30% (e.g., ANU, Macquarie, Leiden, etc.)
Focus on student experience!

Make the most of what UWA offers to postgraduate students!

**Research/Coursework**

- **Desk/Desktop**
  Your place where to study, do research and interact with staff and students

- **Research group meetings**
  Discuss with your supervisor

- **Seminars/Journal Club**
  Hear the latest about the research work done
  At UWA and/or world-wide

- **Student’s Plot of the Week**
  Students-only event to discuss research and socialise

**Training/Support Network**

- **Mentors**
  PhD student/ECR/Staff to provide one-on-one support and expand network

- **Development, Equity and Inclusion Initiatives**
  Training (Mental Health, Resilience, Writing workshops, etc)
  Wards - support network in case of confidential issues
  Anonymous feedback (on-line form or pigeon-hole)

One of the most supportive environments in Australia!

- **Women in STEM Initiative**
  International Centre for Radio Astronomy Research

- **Science in Australia Gender Equity (SAGE) initiative**
  Co-partnered by the Australian Academy of Science and the Australian Academy of Technology and Engineering.
  Other initiatives include the creation of the Pleiades awards, provision of conference childcare, and the targeted hiring of female staff.

However, the issue of gender balance in astronomy (and STEM in general) remains concerning, and the goal of 33% female participation across all levels in astronomy is yet to be achieved. The poor retention of female ECRs is of particular concern, and the Academy's Early- and Mid-Career Researcher (EMCR) Forum is playing a role in supporting and providing advocacy for this group.

Broader equity issues around sexual, cultural, religious and linguistic diversity have also become of more concern to the community, as have issues related to mental health, accessibility and prolonged periods of illness. It is therefore important that astronomy institutes continue to prioritise initiatives that address these issues, and also contribute to schemes which help the broader issue of participation in STEM studies at school. Such schemes include training for girls in schools, promoting female role models in high school science curriculums, etc.
# The program for today

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Duration</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>10:10-10:30</td>
<td><strong>Enrolment and Coursework</strong></td>
<td>10 minutes</td>
<td>Matthew Young</td>
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<td>10:30-11:00</td>
<td><strong>Break</strong></td>
<td>30 minutes</td>
<td>Ryan Turner, Jennifer Hardwick</td>
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<tr>
<td>11:00-11:10</td>
<td><strong>A chat with former M(Phys) students</strong></td>
<td>10 minutes</td>
<td>Fiona Panther</td>
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<td>11:10-12:10</td>
<td><strong>An overview of UWA’s research areas</strong></td>
<td>1 hour</td>
<td>Bruce Gendre, Barbara Catinella, Elisabete da Cunha, Chris Power, David Gozzard</td>
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<td>12:10ish</td>
<td><strong>End</strong> - light lunch for those attending in person</td>
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