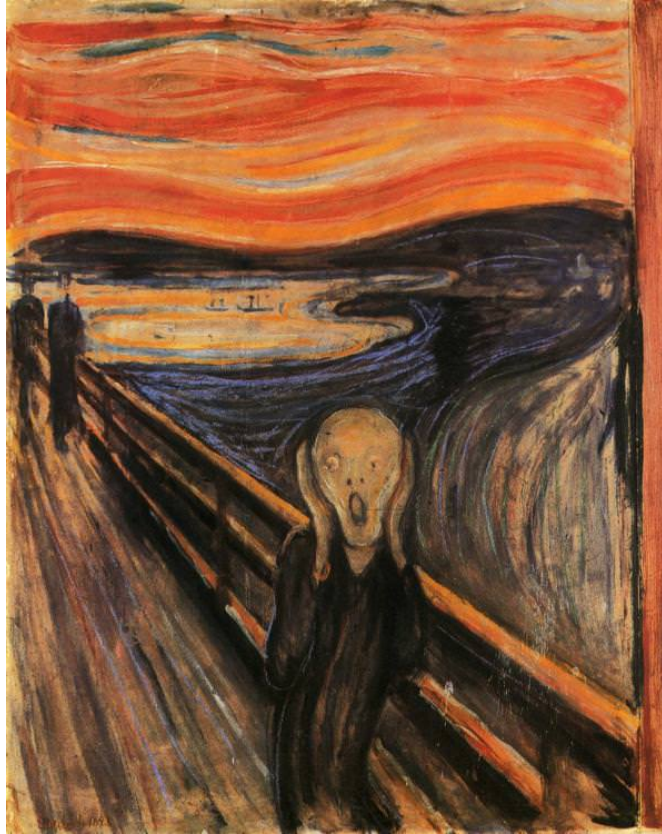


CAS recommendations for PhD Grad Cert* elective units

* Graduate Certificate of Research and Innovation Management

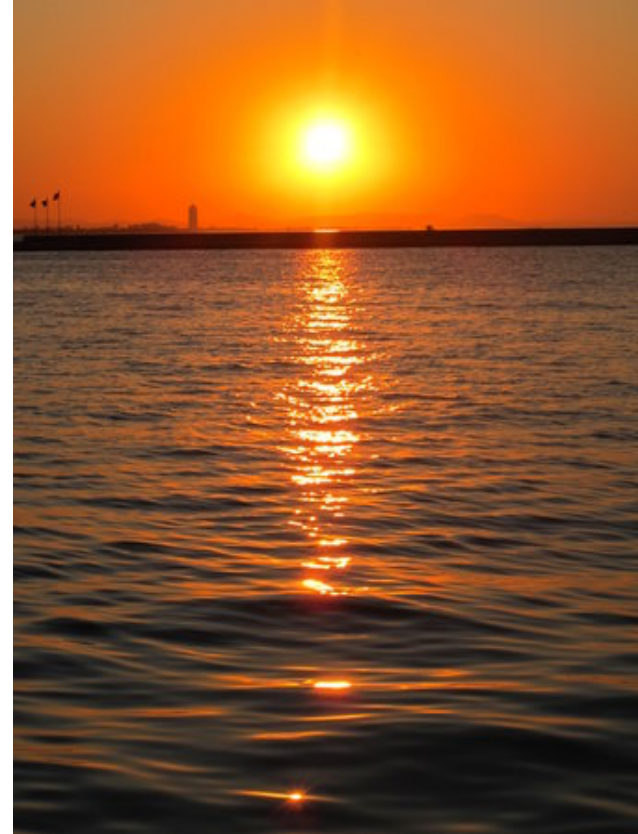
PhD Grad Cert

2 core units



Must be completed **before**
CoC (first ~9 months)

2 elective units



Can be completed **at any**
time prior to submitting PhD

Philosophy for elective units in CAS

- Provide **relevant, high-quality training** for CAS PhD students that is useful for academic or industry pathways
- Utilize **existing activities** in CAS where appropriate
- Offer **flexibility** given interests/focus of different students
- All activities are pass/fail (**no exams**)

CAS students will typically select 2 out of these 3 units:

MFP60005

Research Training
(STEM)

MFP60004

Research Engagement
(STEM)

COM80001

Advanced Research
Communication Skills

Research Training (MFP60005)

CAS students can complete the “Research Training” unit by studying **any two** of the following four options:

Statistics for physical scientists

Primer on topics including descriptive statistics, correlations, hypothesis testing, model-fitting and Bayesian inference combining workshops and online material

Contact: Chris Blake

Data science/computing modules

Covers essential computing topics for an astronomy PhD using online modules and workshops in programming, HPC, visualization and machine learning

Contact: Darren Croton

One of the CAS Honours modules

Students can study either the Galaxies & Cosmology, or General Relativity modules which run in the Physics Honours course (assessments required but no exam)

Contact: Chris Blake

Space industry short course

Introduces students to the space industry landscape in Australia and internationally (mostly online, includes presentation to space industry panel)

Contact: Virginia Kilborn

Research Engagement (MFP60004)

CAS students can complete the “Research Engagement” unit by completing **both** the following 2 activities

CAS colloquia

Students typically attend CAS colloquia, this activity is to provide a brief written reflection (200 words) on four of them

Contact: Emma Ryan-Weber

CAS journal club

Students present 4 papers at the weekly CAS journal club (10-min presentation plus brief written reflection of 200 words)

Contact: Michael Murphy

and also selecting **some** of the following activities:

Public outreach talk or engagement event based on your research

Present a talk about your research at a conference or workshop

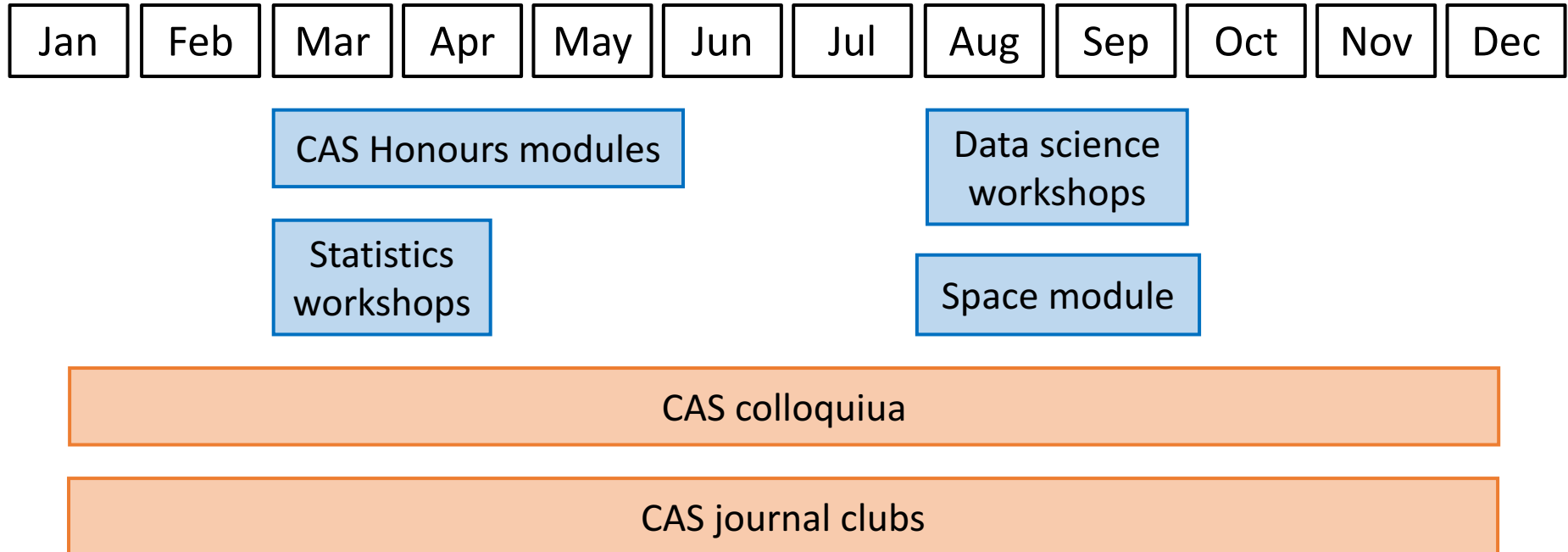
Present a poster about your research at a conference or workshop

Student representative on a scientific committee such as a TAC

Join a **scientific organizing committee** for a conference or workshop

When will these activities run?

- Some activities have face-to-face workshops scheduled once a year, others are “continuous”
- The following timeline is an estimate (will be confirmed at the start of 2020):



Mapping to unit outlines

- In the Faculty unit outlines, finishing each unit involves completing a set of activities worth “150 points”
- In **Research Training** (MFP60005), each of our activities are worth 80 points, so any two of them complete the unit

Statistics for physical
scientists **(80)**

Data science /
computing modules **(80)**

One of the CAS Honours
modules **(80)**

Space industry short
course **(80)**

Mapping to unit outlines

- In the Faculty unit outlines, finishing each unit involves completing a set of activities worth “150 points”
- In **Research Engagement** (MFP60004), the CAS colloquia and journal club activities are together worth 80 points:

CAS colloquia (40)

CAS journal club (40)

- Then choose other activities to add up to 70 points:

Public outreach talk (20)

Conference talk (40)

Student

Conference poster (20)

Conference org (30)

rep (10)

- For example, 2 conference/workshop talks would do it

Frequently Asked Questions

- **How much work will be involved?** We anticipate, **30-60 hours** of direct activity for each unit
- **Can I participate in extra activities?** Yes, all activities are open to all staff and students
- **When will new activities be available?** From the **start of 2020**
- **How are activities approved?** Activities may be logged on the **unit Canvas site** and approved by either your **PhD supervisor** or the **facilitator of the activity** (as appropriate)
- **Can previous activities during my PhD count?** Yes
- **Can I propose different activities?** Yes, please check with Chris Blake (cblake@swin.edu.au)

Questions /
discussion?