

### From the HOD – Professor Mike Reid

Congratulations to David Wiltshire, whose article, co-authored with Alan Coley, has been picked up by Newsweek:

"Does dark energy exist? Einstein's general Relativity could rid us of the need for universe's most mysterious force."

<http://www.newsweek.com/dark-energy-exist-einstein-general-relativity-630260> .

Tomorrow we have the Neil deGrasse Tyson show, A Cosmic Perspective, at Horncastle arena. This promises to be an exciting occasion and a chance to hear a leading science communicator in person.

You will probably have heard that my partner, Roong, and I had a traditional Thai wedding ceremony a week ago. We followed with a much quieter and more personal legal ceremony on Tuesday. Many thanks for the good wishes, and to those who braved the ceremony itself! The photograph includes my sons, Seth and Giles (PhD 2010) and my sister, Kate, and her daughter Madeline, who joined us from Australia. At the conclusion, all of the guests pour water on the hands of the couple, which takes quite a while, so the arm-rests proved extremely useful!



Most of you will be aware that Chemistry and Physics and Astronomy will soon officially become the School of Physical and Chemical Sciences. There will be a search process for the new position of Head of School, but in the meantime Richard and I will continue in our roles.

### Reminders:

**UC Open Day** – Thursday 14<sup>th</sup> July 2017

**Thesis in 3 Competition** ... The Physics and Astronomy round of the PhD and MSc in 3 competition will be held on Thursday 6<sup>th</sup> July. The three winners from this round (1 PhD, 1 MSc and a further student who is either PhD or MSc) will go through to the College of Science competition on the 21<sup>st</sup> July. **Please register your interest by emailing: [jenni.adams@canterbury.ac.nz](mailto:jenni.adams@canterbury.ac.nz) today MONDAY 3 July**

### UC Science facebook

Check out the "I Love Science" competition submissions – at the UC Science facebook page.

### Department Seminars Friday's 11 am in Rutherford Room 531 during term time

Seminars will resume on the 21 July – while there are no seminars scheduled during term break – feel free to contact [Chris Gordon](#) if you or someone you know would like to give a seminar during this time.

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## Sky Charts

Sky Charts are now available through the RASNZ site.

Click on <https://rasnz.org.nz/> then select **The Evening Sky** in a specific month on the left hand side – under “Latest Articles”

### Latest Articles

- [The Evening Sky in July 2017](#)
- [RASNZ Electronic Newsletter May 2017](#)
- [Solar System notes for June, 2017](#)
- [The Evening Sky in June 2017](#)
- [New controls on high-power laser pointers \(2015\)](#)

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## Can we ditch dark energy by better understanding general relativity? [David Wiltshire]

Our own David Wiltshire along with Alan Coley from Dalhousie University reflect on this question in their online essay published here:- [“The Conversation”](#) .

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## Neil deGrasse Tyson: A Cosmic Perspective show

Being held at the Horncastle Arena tomorrow **Tuesday 4 July**.

### Neil DeGrasse Tyson - A Cosmic Perspective



RELATED LINKS ▼

Think Inc., with support from Loop, National Geographic, Newstalk ZB, and the University of Canterbury, are supremely excited to announce for the first time in New Zealand, Dr Neil deGrasse Tyson!

A Cosmic Perspective will see the most famous face in modern science perform one show in Christchurch, which will include a personal presentation by Dr Tyson himself, a fire-side chat with a local personality, and an audience Q&A session to finish.

Expert on star formation, exploding stars, dwarf galaxies, and the structure of our milky way, best-selling author, Emmy Award winner, recipient of nineteen honorary doctorates, and a man who was once named “Sexiest Astrophysicist Alive”, Dr Neil deGrasse Tyson will guide Kiwi audiences on a trip across the cosmos, and help attempt to make sense of some of our biggest questions.

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## Former department student Raphael Nolden’s co-creation – robotic tutor Amy makes the news

Raphael along with Antonia Modkova and Jurgen Brandstetter is part of Osnova and together they have created an AI tutor named Amy!

Read more [online](#) . Here is a small excerpt....

“.....So could a robot ever be as good as the real thing? The Amy prototype being trialled in 10 high schools around the country is a friendly cycloptic animation. She can't provide a shoulder to cry on like Rosie from *The Jetsons*. And (danger, Will Robinson!) – she won't save you from your own mistakes. But she is still evolving and could soon be personalised by students to look like their favourite teacher. A new version of Amy is set to release into more schools around the country in Term 3.”

## Health & Safety [Owen Curnow]

**Ergonomic assessments:** The University has moved to an online ergonomic self-assessment (<http://www.canterbury.ac.nz/hr/hs/ergonomic/ergo-self-assess.shtml>). Once you have gone through this, if there are any problems that you've identified and need help resolving, the university will provide a more extensive in-person assessment and/or the provide appropriate ergonomic equipment if required. The form for this is on the above web site.

| Date            | Training                                | Duration       |
|-----------------|---|----------------|
| <b>July</b>     |   |                |
| Wed 12 & Thu 13 | <a href="#">Comprehensive First Aid</a> | 2 days 9am–4pm |
| Fri 14          | <a href="#">First Aid Revalidation</a>  | 9am–4pm        |

## News from the Physical Sciences/ Engineering Library

- New titles for Physics <http://bit.ly/wafgjA>; new titles for Astronomy <http://bit.ly/xntPcH>; new-titles-list generator <http://bit.ly/1brTI3E>
- Library Liaison Officer for Physics, Dr Chris Gordon <http://bit.ly/GEWv4z>

### From the Web

- Expanded Partnership to Promote Open Access to Particle Physics Journals (IAEA): <http://bit.ly/2ukN7UV>
- Scientists take first tentative steps to explore potential climate of Proxima B (Uni. Of Exeter): <http://bit.ly/2pIWWhp>
- Entropy landscape sheds light on quantum mystery (Rice Uni.): <http://bit.ly/2re8TLY>
- Solving one of nature's great puzzles: what drives the accelerating expansion of the universe? (Uni. Of British Columbia): <http://bit.ly/2qgo0RK>
- Study: to beat science denial, inoculate against misinformers' tricks (Guardian): <http://bit.ly/2pSTj4t>

### On the lighter side...

- A (rather pretty) Wave in the Perseus Cluster 200,000 Light Years Across (YouTube; 2:14): <http://bit.ly/2qq8i8Y>
- Why Every Movie Space Battle Is Wrong! (YouTube; 8:28): <http://bit.ly/2pStGkB>
- The entirety of CalTech's TV show The Mechanical Universe now on YouTube: <http://bit.ly/2qPOHjH>

Brian McElwaine  
EPS Library – Kā Puna Pūkahatāka me te Pūtaiao  
<http://bit.ly/johnarnold-uc>