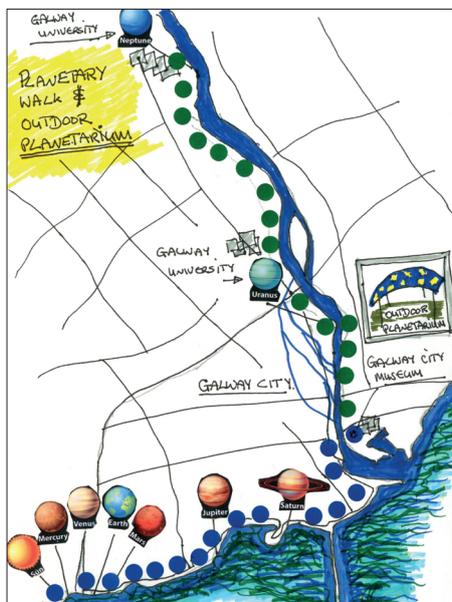


Winning ways forward: RAS 200 awards



Five more innovative projects to mark the RAS bicentenary were announced at the RAS Annual General Meeting on 12 May.

Sue Bowler reports on these new and creative approaches to outreach.



1 Sketch of plans to bring astronomy to Galway.



2 Bounce Back helps prisoners and ex-offenders.

For its bicentenary in 2020, the Royal Astronomical Society is establishing a network of enhanced and extended outreach projects, spreading the enthusiasm for astronomy and geophysics that RAS Fellows share to people who have never experienced the subjects or never thought that they could participate.

RAS200 projects involve partner organizations whose specialist knowledge brings effective ways to share our sciences. The first five projects (Bowler 2015) are getting into their stride. Now the RAS has

selected another five projects, out of 62 submissions. "The huge attention RAS200 has attracted shows the enormous interest in working with the RAS and bringing the sciences we cover to a large and very varied audience," says Steve Miller, chair of the RAS200 committee. "It also shows the depth of commitment, enthusiasm and talent that exists within the RAS for outreach and engagement. That has to augur extremely well for the future of the Society as we approach our 200th anniversary."

Two of the five new RAS200 projects address geography, in part: Making Space, in western Ireland, and Sea to Stars, across Cornwall, address the problems facing remote rural regions, integrating science

with community interests such as Galway's thriving arts scene. Touch the Sky brings the observations and concepts of modern astronomy to blind people using tactile materials. Beyond Prison Walls gives prisoners a wider perspective through astronomy and space science, using virtual reality technology. A new Brownie badge and adventures in astronomy, space and planetary science make up Reaching for the Stars, for girls and young women.

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"RAS200 puts the Society at the cutting edge of public engagement practices"

The enlarging and broadening of the Royal Astronomical Society's reach as a result of RAS200 is something that will resonate with other organizations. "I'm proud that we've been working with external evaluators," says RAS Outreach Officer Sheila Kanani. "By 2022 we will have a huge amount of information to disseminate to the public engagement community, and wider." Miller agrees: "RAS200 puts the Royal Astronomical Society at the cutting edge of public engagement practices, and we will be looking to share our experiences widely."

National University of Ireland Galway

In recent years, Galway has become a centre for the arts and creative culture in general; Making Space will embed astronomy

and geophysics in that culture and use it as a springboard to reach marginalized groups such as people in disadvantaged communities, asylum seekers and Travellers. "Galway is a city that is associated with innovation and creative thinking," says Prof. Andy Shearer of National University of Ireland Galway. "It has continually adapted to its circumstances – economically, socially and culturally. Arts and cultural organizations and festivals have helped to make Galway an internationally recognized cultural destination." The Making Space team wants to focus on the astronomical sciences as a cultural pursuit as well as an economic driver. "With our RAS200 project we want to address this by showing that the astronomical sciences can stimulate artistic projects and ventures," he says. "We want this to be a two-way process whereby we can also, as astronomers, learn different ways of communicating our science to different audiences." Galway will gain an outdoor planetarium, an 8 km planetary walk, a scientist in residence at Galway Arts Festival, community engagement and artistic events. A new youth orchestra, Sym-Phonic Waves, will perform Holst's *Planets Suite* in 2020, 100 years after its premiere, as well as commissioned music reflecting the new astronomy of the past century.

Bounce Back Foundation

The Bounce Back Foundation supports prisoners and ex-offenders in London and the southeast, focusing on employment and on improving conditions in prisons. Beyond Prison Walls aims to spark interest in astronomy, geophysics, planetary and space science among prisoners, their families and local communities. The project will make use of virtual reality techniques – literally expanding the horizons of the prisoners. “We were excited by the idea of enabling prisoners to ‘look at the skies’ and contemplate their place in the vast universe from inside the confined prison walls,” says Joanne Black of Bounce Back. “We will be developing VR training materials so that, for example, when prisons are on lockdown or there are insufficient staff to take trainees to and from our training centres, they can carry on learning from their cells.”

Bounce Back currently works to support ex-prisoners into employment within the local construction industry and Beyond Prison Walls will use this expertise to improve the prison environment and, eventually, build a space or astronomy-themed structure within a prison. “The project will be launched within HMP Brixton as soon as possible,” says Black, “and we are really looking forward to seeing how the initial part of the project – the redecoration of part of the visitors’ centre using the themes of RAS200 – will be received by prisoners and their families and the prison staff.”

Cornwall – Sea to Stars

The Sea to Stars Roadshow is a smaller project that will use a mobile science outreach unit to visit remote communities in Cornwall, presenting astronomy and geophysics in terms of their local connections, such as fishing and navigation. “Cornwall has dark skies, an extraordinarily rich geology, a world-famous satellite station, and a fascinating astronomical and geophysical heritage,” says Jon Dean of Truro High School for Girls, one of the partner organizations coming together for this project. “Nearly five million tourists visit Cornwall each summer, but the county’s resident population includes some groups of extreme deprivation. We will be able to take astronomy and geophysics directly to people all over the county. However, the real strength of our bid has come from the consortium of very diverse organizations that we bring together.”



3 Girlguiding plans astronomical adventures.

Royal National Institute for Blind People

Touch the Sky: Tactile Stargazing for Blind People uses innovative tactile teaching materials to show the night sky to people with sight loss. The Royal National Institute for Blind People (RNIB) is working with Glasgow Science Centre to help blind people in the UK explore the night sky. They will use “starballs”, detailed tactile maps of the constellations, that will be made available to 10 hubs around the country, at museums and science centres. “With over two million people living in the UK with sight loss,” says Terry Hawkins, “the RNIB is delighted to be working with the RAS on this exciting Touch the Sky project.” Touch the Sky will also produce and distribute an atlas of deep sky objects such as the Orion Nebula, putting blind people in touch with the concepts and observations that underpin modern astronomy. Touch the Sky will make use of RNIB expertise – training staff at the hubs to better understand sight loss, for example – as well as the networks at the hubs to engage with people with sight loss, such as adults from areas of socioeconomic deprivation; they are also developing outreach activities for elderly people with sight loss.

Girlguiding

Reaching for the Stars: Adventures in Space for Girls and Young Women is a project involving Girlguiding and the UK Space Agency, to include astronomy, space and planetary science in the range of activities and opportunities they provide. “The idea for Reaching for the Stars came from the extensive consultation we do with girls and young women,” says Robyn McAllister of Girlguiding. “They told us that they love the scope for exploration, adventures and

discovery that space gives them. We were fortunate

to form a strong partnership with UK Space Agency and through our discussions it became clear that we could extend our original idea to give girls more opportunities to get hands-on with astronomy and space science.” Reaching for the Stars will develop interactive and engaging activities for all their age groups, locally and at national Girlguiding events and all with significant input from the girls themselves. The project will also involve women Fellows of the RAS as volunteers and role models. “We are really excited about what the next five years will hold and the opportunity to embed space science and astronomy in what we offer to girls and young women long-term,” says McAllister. “We are passionate about giving girls opportunities that broaden their horizons, enable them to try new things and have adventures – Reaching for the Stars encapsulates this perfectly.”

Looking forward

The first RAS200 projects (Bowler 2016) are already bringing surprises. The Prince’s Trust, for example, is finding that young people tend to talk more about difficult times in their lives while observing. “The first tranche has been so successful and I can’t wait to see what the second tranche will bring,” says the RAS’s Sheila Kanani. “We’ve got an excellent spread in terms of diverse audiences, geography and innovation too.” Steve Miller agrees: “RAS200 is a very exciting project, of which the RAS can be really proud. The portfolio of projects that RAS200 has funded will make a real difference – to disadvantaged young people and regions, to people with caring responsibilities, to people who would have liked to do better at school or took a wrong turning in later life, to people whose personal circumstances make engaging with astronomy and geophysics extra challenging, as well as to the wider general public.” That’s something to look forward to – and a great 200th birthday present. ●

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REFERENCES

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MORE INFORMATION

Bounce Back Project <http://bouncebackproject.com>
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NUI Galway <http://nuigalway.ie>
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