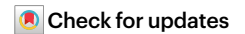


Reach for the stars and the public



Astronomy has always been a direct way to bring science to the public. From planetariums to books and initiatives to bring the night sky to all corners of the world, our only limit is creativity (and funding).

In October 1923, the night sky was recreated indoors by the Zeiss Mark I projector (pictured) inside a dome atop the Zeiss factory in Jena, Germany. Stargazing was no longer dependent on the time of day or even the weather. From Germany, the planetarium spread to the rest of Europe, then the United States, Australia, Uruguay and beyond. And this month we celebrate a century of planetariums with a [Comment](#) by Michael McConville, Björn Voss and Guilherme Maranghello. They explain how 4,000 planetariums around the world now bring the wonders of the Universe to roughly 140 million visitors a year. But the distribution is heavily skewed and Africa has very few.

For those without a local planetarium, events such as the Astronomy Photographer of the Year competition administered by the Royal Observatory Greenwich, UK (which does have a planetarium), is an excellent outreach vehicle, with more than 4,000 entries from 64 countries. The award ceremony is accessible online, as are the winning entries. This year's overall [winner](#), announced on 14 September 2023, was actually a trio of amateur astronomers; their stunning image of familiar Andromeda includes an unfamiliar blue plasma arc of unknown origin. Both the quality and content of their image blur the lines between amateur and professional astronomy.

Another way to appreciate astronomy on a rainy day is with a book. In a [Books & Arts article](#) in this issue, Queenie Chan reviews *Bennu 3-D: Anatomy of an Asteroid* by Dante Lauretta and co-authors. The text describes NASA's OSIRIS-REx mission to Bennu in detail, and the stereoscopic images pioneered by



Brian May bring the sample-return mission to life. More than mere decoration, the 'stereos' add depth and make certain features pop out of the page.

The book's release is well timed with the return of the capsule containing roughly 250 g of rock and dust from Bennu, which landed safely on 24 September 2023. The long-awaited pristine surface sample will be distributed to many different teams for analysis; a good proportion of the sample will be stored, with a view to future technology.

While big missions such as NASA's OSIRIS-REx – not to mention the ever-surprising JWST – are excellent outreach vehicles, individuals and small groups can also make a very strong impact in inspiring the next generation to choose science and technology. The list of such actions is constantly growing. Take [Travelling Telescope](#), for instance. They stimulate social change by bringing astronomy to remote parts of Kenya. Founder and CEO Susan Murabana and her husband Daniel Chu Owen regularly visit rural

communities with just a telescope and an inflatable planetarium. Between such visits, space camps, Star Safaris, school trips and more, Murabana has shared her love of astronomy with up to 400,000 people since launching Travelling Telescope in 2014 (S. Machira, 'I want to see the first African woman in space': the Kenyan stargazer bringing astronomy to the people. *The Guardian*; 18 September 2023).

Whether one is simply looking up or through a telescope or sitting in a planetarium, the Universe has never been more accessible. There are many mobile phone apps for stargazing, not to mention live alerts to auroral occurrences and meteor showers. A ready audience awaits. So get involved, through donating your time or money. Talk to your community. Engage with creative initiatives such as Travelling Telescope. Visit a planetarium and see how far they have come in 100 years.

Published online: 17 October 2023