June 2019

The Space Zone was a themed zone for primary schools supported by the Science & Technology Facilities Council and NCOP schools. It featured six scientists:

- Nicolas Bonne studies galaxies and finds ways to allow people with sight problems to learn about space.
- Laurence Datrier is researching ways to find out when neutron stars collide.
- Emma Davies studies massive explosions from the Sun that can hit Earth.
- Declan Jonckers organises the design and manufacture of Multi-Layer Insulations, a ‘space blanket’ which helps to keep a spacecraft’s temperature at the right level.
- Bella Boulderstone, the winner in the Space Zone, tries to find the size of structures around supermassive black holes using dust as a space radar.
- Ali Hussain develops instruments to generate light to interact with matter in space and show its properties.

Key figures from the Space Zone and the averages of the June zones

<table>
<thead>
<tr>
<th>PAGE VIEWS</th>
<th>SPACE ZONE</th>
<th>JUNE ‘19 ZONES AVERAGE</th>
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</thead>
<tbody>
<tr>
<td>Total zone</td>
<td>16,757</td>
<td>14,954</td>
</tr>
<tr>
<td>ASK page</td>
<td>1,474</td>
<td>1,171</td>
</tr>
<tr>
<td>CHAT page</td>
<td>1,447</td>
<td>1,374</td>
</tr>
<tr>
<td>VOTE page</td>
<td>1,461</td>
<td>1,415</td>
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</table>

The Space Zone was the busiest of all June’s zones in terms of live chats, with lots of questions on the topic of space.

Popular topics

Students asked about everything from black holes, to galaxies, to space travel, and planets.

Students were very interested in the scientists work and asked for more information about what they had read on their profiles. For example, Declan was asked about the space blankets he develops for spacecraft, with students wanting to know what they are made of and if they work like foil blankets. Emma was asked whether the explosions she studies are dangerous, if they ever reach Earth and what’s the biggest one she’s ever seen.

Students asked Nicolas about his vision problems and how being blind affects his work as an astronomer, with many students commenting that they find him inspirational. They asked about his day to day life and how found using the I’m a Scientist website. Nicolas was great at answering these questions, telling students that his disability can make things difficult but explaining the ways he works and the special equipment he uses.
School data at a glance

We want to increase the participation of under-represented groups going into STEM careers. Find out what we mean by our under-served (U) and WP schools (WP), and how you can support us in working with more of these at about.imascientist.org.uk/under-served-and-wp/

Scientist Activity

<table>
<thead>
<tr>
<th>SCIENTISTS</th>
<th>PROFILE VIEWS</th>
<th>POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bella Boulderstone</td>
<td>534</td>
<td>Winner</td>
</tr>
<tr>
<td>Nicolas Bonne</td>
<td>710</td>
<td>2nd</td>
</tr>
<tr>
<td>Emma Davies</td>
<td>605</td>
<td>3rd</td>
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<tr>
<td>Declan Jonckers</td>
<td>532</td>
<td>4th</td>
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<tr>
<td>Ali Hussain</td>
<td>485</td>
<td>5th</td>
</tr>
<tr>
<td>Laurence Datrier</td>
<td>549</td>
<td>6th</td>
</tr>
</tbody>
</table>

01225 326892 | michaela@mangorol.la
Question themes and example questions in the Zone

Find out about how we’ve coded the questions at about.imascientist.org.uk/what-do-students-ask-about/

- How did you feel after you went blind? Or were you blind when you were born?
- Would you have liked to have stayed longer at the ESA?
- How long did it take to get all your qualifications?
- How long do you think it will take to make your first instrument?
- Is it possible for a sun explosion to be so big that it hits the earth?
- Have you found any weird substance in the dust of the black hole?
- How wide is the universe?
- How did you feel after you went blind? Or were you blind when you were born?
- How long did it take to get all your qualifications?
- How long do you think it will take to make your first instrument?

Historic Per-Zone Average (Themed Zones)

Science topics: 37%
Working scientifically: 18%
Careers and Education: 27%
Personal: 13%
Event/other: 5%
Examples of good engagement

Lots of students were inspired by Nicolas and wanted to know how he was able to work as a scientist with his visual impairment. Nicolas was great at talking with students about his disability and showing them that a career in science is still accessible:

“Do you find it hard being blind and being an astronomer?” – Student

“It can be difficult sometimes, because so much of astronomy is visual. When I did research for my PhD, I mostly looked at big tables of numbers (all of the numbers told me different things about galaxies, like their shape, their size, their colour etc) There are ways of getting around not being able to see well though. Most of what I work on right now involves finding ways to not use vision to understand astronomy. I also get to talk to people about astronomy, which doesn’t need vision at all.” – Nicolas, Scientist

“Not trying to be rude but how do you read the question(s)” – Student

“Its not rude at all, so don’t worry. I can actually see just a little bit, but only right at the end of my nose. As long as the text is large enough, and the contrast is good enough. I do have a bit of trouble keeping up with the speed that questions are asked though 😊 If I were totally blind, I would still be able to do this using a program that reads what is on my computer screen. I actually use this type of program when my eyes are really tired” – Nicolas, Scientist

Students and scientists bonded over their shared interest in their pets, an experience that helped students appreciate that scientists are people ‘like them’. Getting to know scientists like this helps support the development of their science capital:

“What is your favourite animal?” – Student

“Definitely dogs! They’re just so loyal and loving :”) – Emma, Scientist

“I don’t really like dogs that much” – Student

“Oh no! Are you more of a cat person?” – Emma, Scientist

“I have a cat but I like big dogs” – Student

“Big dogs are my favourites! But I do like cats too - we have a cheeky one that lives next door to us, but is always trying to run into our house!” – Emma, Scientist

“LOL” – Student

Scientist winner: Bella Boulderstone

Bella’s plans for the prize money: “I’ve learned that the term for people who I want to reach are those with ‘low science capital’ – people who don’t think of themselves as science minded, people who are out of school and don’t have many opportunities to engage with science themselves, people who wouldn’t come to events that we put on. We have to go and find them: science is for everyone. It’s why I’m going to start ‘Science at the Hairdressers’ where we get scientists to go into hairdressers to discuss what it is that they do to people (absolutely no scientists giving haircuts - leave that to the professionals!). I think it’s a good way to get people to have a chat about space, science or even, aliens.”

Read Bella’s thank you message.
**Student winner: Itzyagirl_niamh**

As the student winner, Itzyagirl_niamh will receive a certificate and a gift voucher.

**Feedback**

We’re still collecting feedback from teachers, students and scientists but here are a few of the comments made about June’s *I’m a Scientist*...

“We had pupils STAYING LATE AFTER SCHOOL ON A FRIDAY(!) to find out the result - so to all of you involved, that’s the level of excitement and interest you’ve helped generate.” – **Teacher**

“I have learnt that your background life doesn’t just have to be about science as well and that you can do running, cooking, football etc in your free time” – **Student**

“As it is online, there’s a real sense of flexibility compared to other types of science engagement (where you physically have to be there). Communicating with schools all over the country is also very rewarding.” – **Scientist**

“It appeals to children with all types of abilities and gives them the opportunity to ask questions at their own level of understanding. The enthusiasm of the scientists involved is contagious and students get very excited when questions are answered.” – **Teacher**