
Verity


Sergio


Nick


Maria


David


Annette

March, 2019

The Seaborgium Zone was a general science zone supported by the Science & Technology Facilities Council. In the zone were six scientists:

- Verity Fryer, a clinical scientist who analyses DNA in a hospital.
- Sergio Adan Bermudez, a PhD student who uses lasers to research potential cancer cures.
- Nick Werren, an STFC-funded PhD student and the winner of this zone, is a physicist who specialises in quantum biology.
- Maria Walach, a physicist who studies the Earth's magnetic field.
- David Whitworth, an STFC-funded PhD student who studies dwarf galaxies.
- Annette Raffan, a research technician who studies soil around plant roots and used Diamond Light Source for research.

Key figures from the Seaborgium Zone and the averages of the March zones

PAGE VIEWS	SEABORGIUM ZONE	MAR '19 ZONES AVERAGE
Total zone	9,621	15,399
ASK page	325	1,114
CHAT page	721	1,291
VOTE page	609	1,327

	SEABORGIUM ZONE	MAR '19 ZONES AVERAGE	IAS 2012-19 AVERAGE
Seaborgium Zone Schools	8	8	10
Students logged in	225	388	391
% of students active in ASK, CHAT or VOTE	89%	92%	86%
Questions asked	134	443	675
Questions approved	89	216	297
Answers given	249	437	532
Comments	12	29	71
Votes	171	312	308
Live chats	15	19	16
Lines of live chat	4,922	6,732	5,711
Average lines per live chat	328	352	358

Popular topics

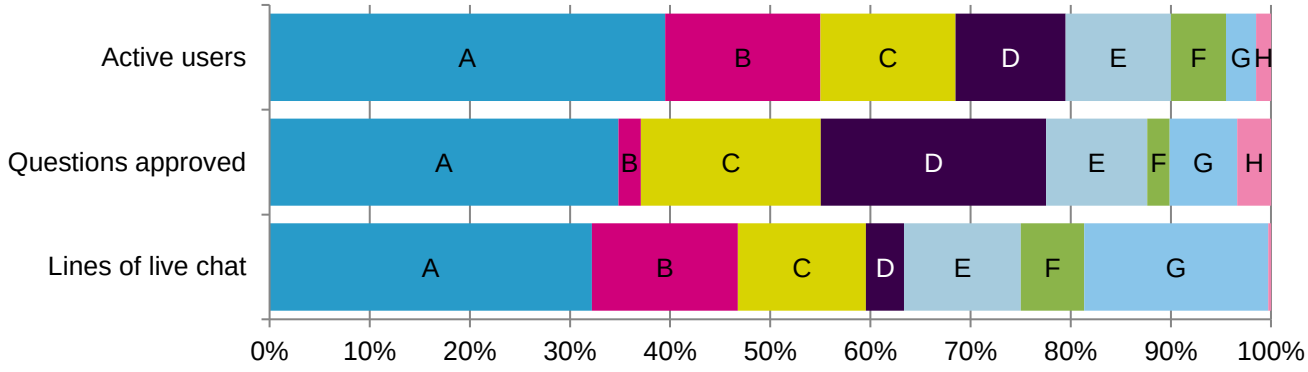
Over 50% of the questions sent to the scientists through ASK were about science topics, a higher percentage than the average for a general science zone.

'Space' was a very popular topic because of Maria and David's work. Students asked about planets, gravity and the possibility of humans living on another planet. There were also discussions around climate change and the future of the environment, with students asking for advice and opinions from the scientists.

Students wanted to know more about Nick's work and quantum biology. Some did not know what quantum biology was, and after receiving Nick's explanation they would follow up with questions such as "how do you think understanding quantum will help us in the future?"

Verity Sergio Nick Maria David Annette

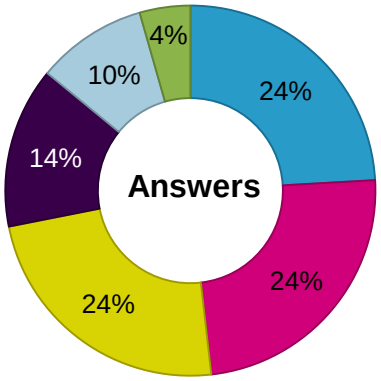
School data at a glance

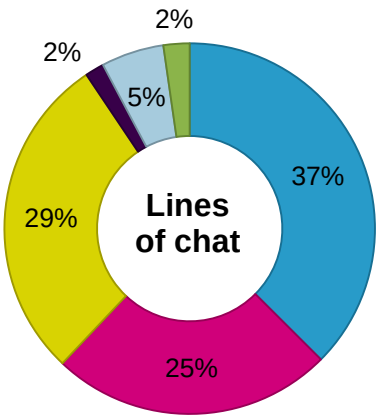


	School	Year/s	Classes
A	Meridian School, Royston	Y10	5
B	Hammersmith Academy, London, WP	Y9, Y10	2
C	The Elton High School, Bury	Y8	2
D	Ribblesdale High School, Clitheroe, U	Y8	2
E	Beverley High School, Beverley	Mixed STEM Club	2
F	Ethos College, Huddersfield, WP	Y10	2
G	Freman College, Buntingford, U	Y12	1
H	Stirling High School, Stirling	S1	1

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





SCIENTIST	PROFILE VIEWS	POSITION
Nick Werren	266	Winner
David Whitworth	244	2nd
Maria Walach	235	3rd
Sergio Bermudez	203	4th
Annette Raffan	118	5th
Verity Fryer	143	6th

Seaborgium Zone Sg


Verity


Sergio


Nick


Maria

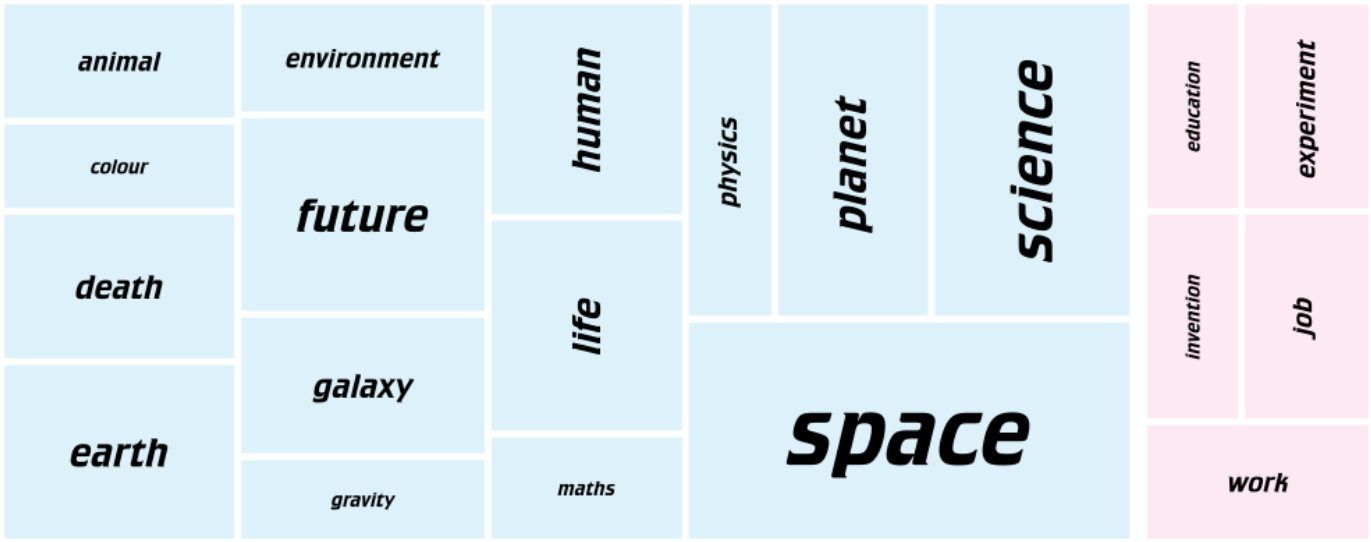

David


Annette

I'm a Scientist Get me out of here

Top Keywords of questions approved in the Zone

Area represents frequency of use



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/

is the pickle torch edible for your prize money idea?

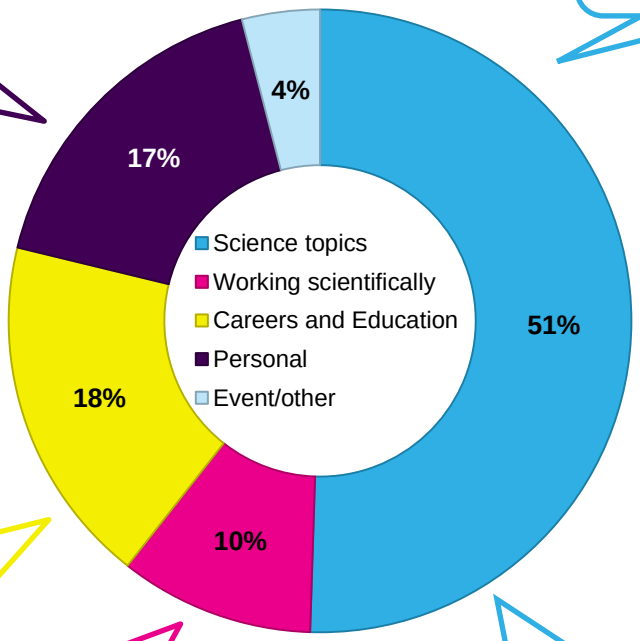
Hi Sergio, what is nanoscience?

Do You Think That There Are Any Elements That We Haven't Discovered?

What's on the top of your bucket list?

Theoretically if the Earths electromagnetic field disappeared what would happen to Earth and life on earth??

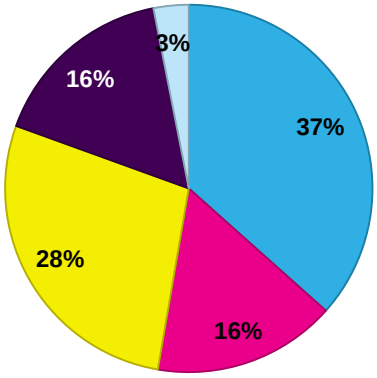
What discovery are you most proud of?



Maria if u struggled with maths what inspired you to get involved with physics?

Nick how do you think understanding quantum will help us in the future?

Are there other planets with a similar level of gravity to ours?



Historic Per-Zone Average (General Zones)

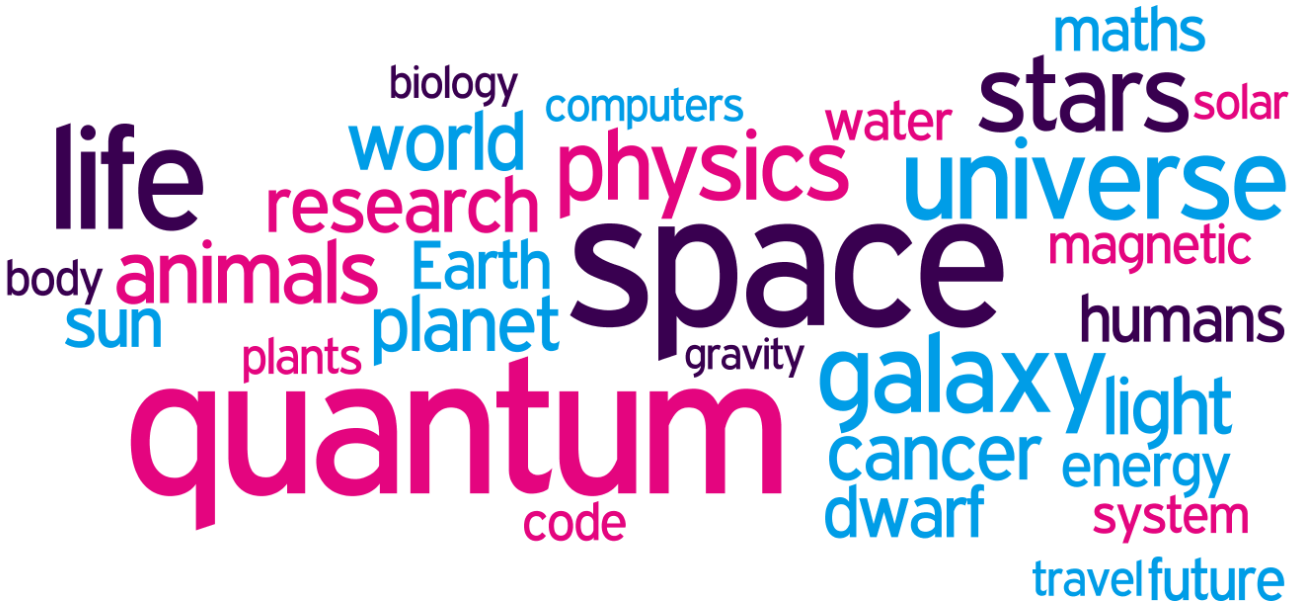
MangorollaCIC 01225 326892 | amy@mangorol.la

Seaborgium Zone Sg

Science & Technology Facilities Council | UK Research and Innovation

Chat

Frequent words used in live chats by students and scientists. Size of the word represents its popularity



Examples of good engagement

Students showed an interest in the context of science within society, and scientists offered an insight into the problems with science and popular media:

> *"What do you think the biggest gap in the science department right now is??" -* ***Student***
>
> *"Hmmm that's a good question! In science in general, I think there is a disconnect between some of the most pressing issues, scientific knowledge and the general understanding of it in society.*
>
> *For example, we know climate change is real, we have all the data, we know what to do about it, but there seems to be an unwillingness in society and politics to change things. It's a difficult gap for us scientists to fill because the implementation of policies involves everyone!*
>
> *Some big gaps at the moment I think are: is finding more sustainable ways to produce and store energy, working out how to deal with the evolution of superbugs, feeding an ever growing population…It's a long list!"* ***- Maria, Scientist***
>
> *"Thats a very large question, in terms of knowledge I would probably have to say engineering skill. We have soo many theories we want to test and explore and know how to do it, but our skill and knowledge of how to build the experiments is holding us back. Its hard to say for science specifically as each scientist will have different ideas of what is important and what needs to be looked at.*
>
> *For me, an astrophysicist I think one of the biggest gaps is in knowing what dark matter and dark energy are. This will solve many of the questions around the big*

bang and where the universe came from. For a biologist, it might be finding a universal cure for cancer, a chemist might want to make carbon nano tubes." **- *David, Scientist***

"The biggest gap in science at the moment is its relationship with the general public.Science shows that climate change is getting worse, meanwhile in rich people are becoming richer! Scientists need to be louder, communicate their research more, and work together to get politicians and companies to listen to them!" **- *Nick, Scientist***

Scientist winner: Nick Werren

Nick's plans for the prize money: "*I want to interview school kids/find out what their BIG QUESTIONS are and then record the researchers answering them. All I'd need to do this is audio equipment!*"

Read Nick's **thank you message.**

Student winner: Lou

Lou from Freman College was nominated by the scientists for being 'wholesome, fun, and inquisitive about space!' Their ASK questions included: "Theoretically if the Earths electromagnetic field disappeared what would happen to Earth and life on earth?"

As the student winner, Lou 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 the Seaborgium Zone…

[I have learnt] scientists are normal people aswell not just nerds – **Student**

I sign up every term as it is a great addition to help students engage with science. It also ticks an Ofsted box of helping disadvantaged students to relate what happens in the classroom to the real world. – **Teacher**


Verity


Sergio


Nick


Maria


David


Annette

Feedback

We're still collecting feedback from teachers, students and students but here are a few of the comments made about March's *I'm a Scientist* activity…

It was fab! The children were engaged, there was a buzz around the room! What a pleasure to witness and inspire them! – **Teacher**

[I have learnt] a lot really about the level I should keep in a conversation to keep interest and how to give students little snippets of info so they do become curious... a crash course in communication really.

And I think I just became passionate about them, who they are what they think, what interests them **– Silvia, scientist**

I have learnt that the diversity of jobs in science is much larger than I thought. – **Student**

Thank you very much for answering all of our questions. we have learnt a lot today and we really appreciate it because it has truly inspired us to follow our dreams and not worry about all the bumps in the way – **Student**

I sign up every term as it is a great addition to help students engage with science. It also ticks an Ofsted box of helping disadvantaged students to relate what happens in the classroom to the real world. – **Teacher**

love the live chats! It gives students the chance to ask anything and they really do! I have grown so much through my participation in this event! Thank You! – **Scientist**