



Simon



Selen



Paul



Nawapat



Natalie



Katy

## November 2019

The Darmstadtium Zone was a general science zone, supported by Wellcome and involved six scientists all working in a variety of areas:

- Simon Brown is a technician at University of Bath chemistry department
- Selen Ozbek is a psychologist, investigating how blindness affects the circadian rhythm of veterans and army personnel
- Paul Laurance-Young, the winner in this Zone, is a biomedical scientist in cellular pathology
- Nawapat Kaweeyanun is a space physicist looking at Jupiter's largest moon, Ganymede, preparing for a mission to find out if it once hosted life
- Natalie Fowler is a clinical scientist working at a hospital, ensuring the correct machines are being used and are working properly for the sickest patients
- Katy Bruce is a PhD student in Forensic Chemistry, looking at whether traces of makeup at a crime scene could be used as reliable sources of evidence

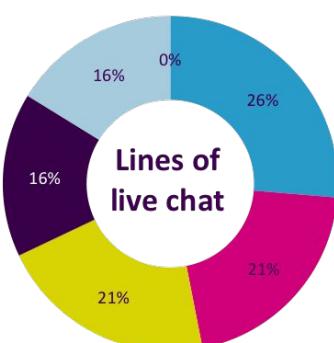
## Key figures

This zone saw twice as many questions in ASK, and answers given, than the average across all of November's zones.

Darmstadtium Zone did however see fewer students logging in than other zones, and fewer live chats took place, although those that did were very busy.

	DARMSTADTIUM ZONE	NOV '19 ZONES AVERAGE	2012-19 ZONES AVERAGE
Schools	7	10	10
Students logged in	288	368	389
% of students active in ASK, CHAT, VOTE, or comments	90%	91%	87%
Questions asked	1134	571	659
Questions approved	516	262	291
Answers given	1004	457	525
Comments	108	45	69
Votes	253	294	307
Live chats	13	18	17
Lines of live chat	5972	6334	5771
Average lines per chat	459	352	356

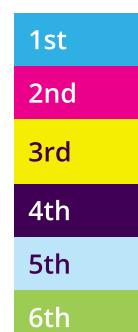
## Scientist activity



### SCIENTIST

Paul Laurance-Young  
Natalie Fowler  
Nawapat Kaweeyanun  
Katy Bruce  
Simon Brown  
Selen Ozbek

### PLACE





Simon



Selen



Paul



Nawapat

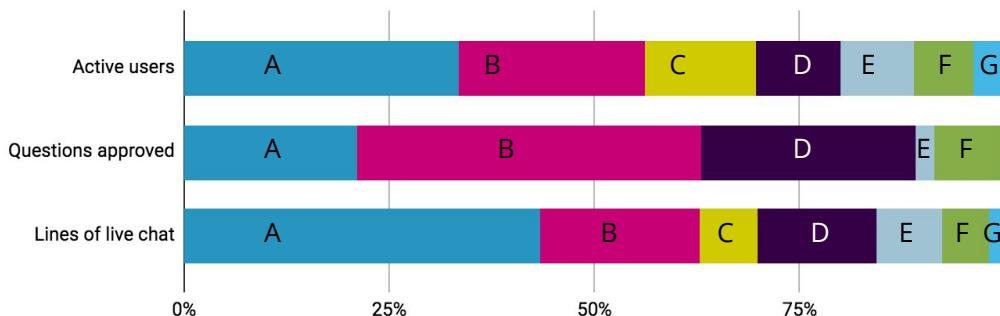


Natalie



Katy

## School activity



	YEAR GROUP(S)	CLASSES
A	Torquay Girls Grammar School, Torquay (U)	7, 8
B	The Co-Operative Academy of Manchester, Manchester (WP)	8, 9
C	The Burton Borough School, Newport (U)	10, 11
D	Harris Girls' Academy East Dulwich, London (WP)	7, 8
E	Niddrie Mill Primary School, Edinburgh City (WP)	4
F	Marr College, South Ayrshire (U)	7, 8
G	Heathfield Community College, Heathfield (U)	Mixed

We have found that schools that are more than 30 minutes travel time from their closest Higher Education Institution are less likely to receive visits and benefit from engagement activities. We give priority to underserved (U) and widening participation (WP) schools when allocating places. Find out more about our research at <https://about.imascientist.org.uk/2017/school-engagement-in-stem-enrichment-effect-of-school-location/>



## Frequent words used in live chats by students and scientists



body  
Ganymede  
**space**  
makeup  
earth  
moon  
lab  
change  
future  
blood  
chemistry  
cancer  
fun  
crime  
**world**  
**school**  
research  
experiments  
study  
physics  
money  
patients  
cure

## Question analysis



What animal would you use to describe as yourself?

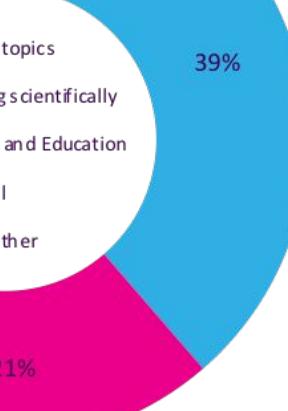
When we 'accidentally' discovered Ganymede, how did we know that it was a moon and not a planet?

What would you say to someone that wants to go into science? I think you are very inspirational!

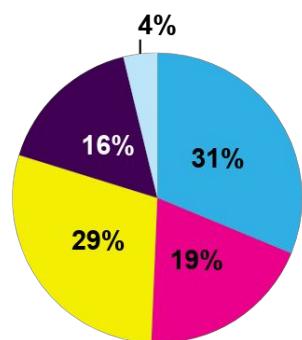
Do you diagnose people frequently?

Do you travel a lot in your job? If so, where?

Do you think that the science industry is fair?



Does your religion affect your job?



Historic Per-Zone Average (Themed Zone)



Simon



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## Examples of good engagement

Students took the opportunity to ask for advice on education and in general. Scientists often gave honest answers, such as in this example from a live chat:

*"What would you say to a 10-year-old version of yourself?" – Student*

*"I'd say that the world really is your oyster, you can be anything you want to be if you are willing to work hard and stay positive. Never let anyone else's negativity get you down!" – Natalie, Scientist*

*"Don't lose your focus, there will be time to play and time to work. I spent an awful lot of time playing when I should have been working; Consequently as an adult I have had to work twice as hard to make up for it." – Paul, Scientist*

*"Your future may change a lot. Keep an open mind and don't dismiss a chance to do something just because it doesn't seem like something you would do. Life's much more fun when you are flexible!" – Nawapat, Scientist*

*"[I would say] stop stalling and have some fun. You only live once." - Student*

There was a lot of interest from students about the scientists individual projects. In this example, Nawapat was great at explaining their research in an accessible way, for the student to understand and ask follow up questions:

*"Nawapat why did you choose to study Ganymede, over many other planet moons in our atmosphere?" – Student*

*"Ganymede is very special because it's the only moon that is magnetic (like Earth actually). Not only that, it also has a huge ocean so it's a great potential homes for us humans in the future" – Nawapat, Scientist*

*"how will you react if your mission goes well, or not so much?" – Student*

*"I would be very delighted with my mission. It could change how we see the future of humanity entirely! However, many things can go wrong in space so if my mission failed there would be no choice but to accept and try again. " – Nawapat, Scientist*

*"how would you feel if you do discover life on Ganymede, and what would happen next?" – Student*

*"If we discover life in Ganymede, the moon will be considered a good target for humans in the future. But it will be a long time before we plan to send people there given it's so far away! Personally I would be very delighted for sure!" – Nawapat, Scientist*

*"Thank you. how do you have enough computer technology to understand how to picture Ganymede in detail?" – Student*

*" I picture Ganymede's magnetic field using maths equations, which was created (by someone else) using data from a satellite that was at Ganymede in the 1990's. Then I use satellite data to make educated guess about conditions around the magnetic field. The secret is you don't need all the details, you just need enough to answer the questions you seek!" – Nawapat, Scientist*

*"at least you managed to reach your goals, and be an inspiration to others. Good luck in the final stage of voting" – Student*



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## Scientist winner: Paul Laurance-Young

Paul's plans for the prize money: "*I'd like to do a roadshow for schools in the Plymouth and Cornwall area (with prizes!) to tell people about what jobs hospital scientists and technicians can offer. About how great being a scientist actually is. So many kids think that science is for old men in white coats or they won't enjoy it or it's boring - I can definitely tell you that helping to save someone's life never gets boring! Even if you don't have the best grades, you can still work in science!*"

Read Paul's [thank you message](#)

## Student winner: sensescience435

As the student winner, sensescience435 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 November's *I'm a Scientist*...

*Both classes absolutely loved taking part and my class actually clap at the end of the live chat... This project encourages a greater understanding and interest in science. Pupils see scientists as real people with interests like their own. It breaks down the stereotypes around the career. Taking part also encourages the pupils to think about the world of work and future careers.*

— Teacher

*I particularly enjoyed the live chats with classes because the engagement was totally led by them and it was a lot of fun to chat about such a variety of things, from being a researcher, to their questions about dementia, to our favourite snacks, to Netflix - I'll miss doing them a lot! And, in chats, there were some questions that came up frequently, which has given me a better idea of some of the concerns/questions of younger people.*

— Scientist

*We had our first live chat today and the students loved it!! It was so lovely to see them so engaged with the live chat and some of their questions were fab!*

— Teacher

*[The students] forced me to think more widely about my research and find connections I hadn't thought of.*

— Katy, Scientist

*I'm a Scientist has changed my perspective on science*

— Student