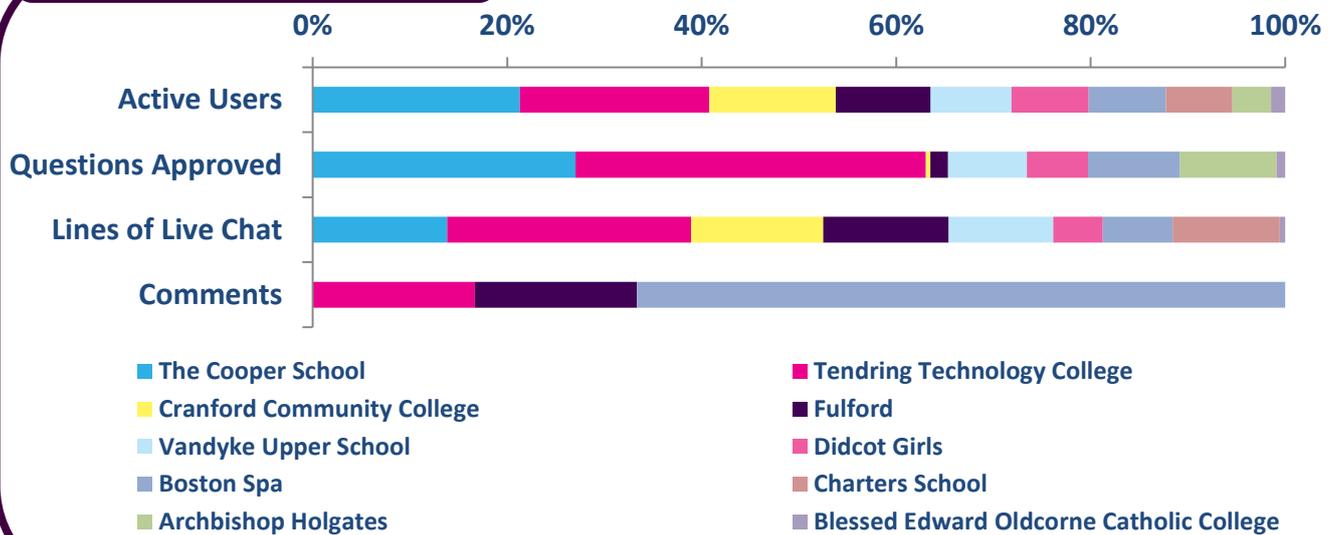




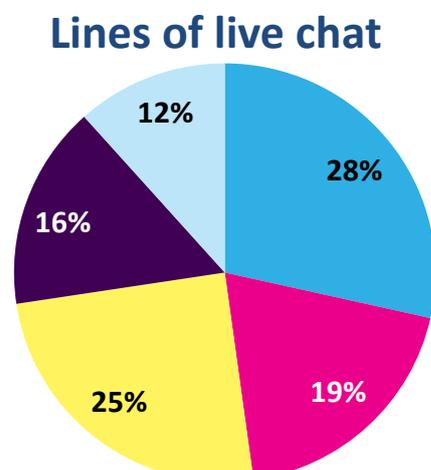
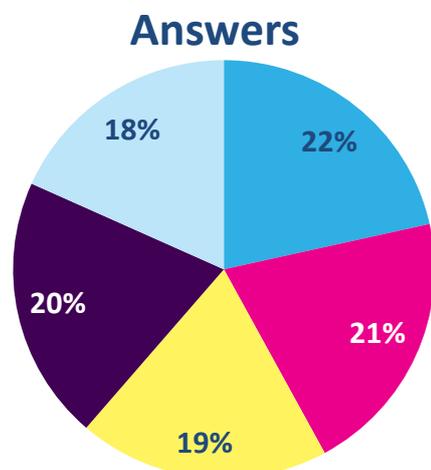
## March 2015

The Medical Physics zone had the most students of all the zones and the most live chats. It was run as part of a study organised by the Institute of Physics, which investigated gender behaviour during the event. This meant that double the usual number of classes was signed up for this zone. The scientists who took part were all involved with imaging and treating patients using MRI or radiation therapy. This was a competitive zone where all scientists contributed a similar level of answers and each attended many of the increased number of chats.

### School data at a glance



### Scientists activity



Scientist	Profile views	Position
Glafkos Havariyoun	2,022	Winner
Paul Booker	1,447	2nd
Pauline Hall Barrientos	1,733	3rd
Clare Devery	1,898	4th
Samantha Terry	1,595	5th

Key figures from the Medical Physics Zone, and the average of the March zones

PAGE VIEWS	MEDICAL PHYSICS ZONE	MARCH '15 ZONES AVERAGE
Total zone	46,981	36,564
ASK page	2,535	2,481
CHAT page	6,772	4,878
VOTE page	3,034	2,422

	MEDICAL PHYSICS ZONE	MARCH '15 ZONES AVERAGE	IAS AVERAGE
Registered students	488	383	338
% of students active in ASK, CHAT or VOTE	58%	87%	83%
Questions asked	371	496	713
Questions approved	220	238	297
Answers given	711	495	540
Comments	20	45	86
Votes	228	299	270
Lines of live chat	6,528	5,467	4437
Live chats	24	17	13
Average lines of live chat	272	331	335
Schools	11	10	8

The percentage of active students was noticeably lower than the average. There were three schools where internet filtering meant that students appeared to be logged in to the site, but were unable to participate.

### Popular topics

The questions from students were often focused on the treatment side of medical physics, the work that the scientists did, and their career choices. General science questions were also popular, which stretched the knowledge of the participants.

Cancer was a major theme in both the live chats and Ask, stemming from the background of the scientists. This allowed for a wide range of topics to be discussed including risks of radiation, side effects, personal feelings, and animal testing. The careers of the scientists were also of interest to the students, perhaps reflecting the relatively low profile of medical physics.



Keywords from live chats in the zone, size of the word represents its popularity



# Ask?

Keywords of questions asked in the zone, length of bar represents frequency of use

0 1 2 3 4 5 6 7 8 9



## Example Questions (click for links)

- “Have you ever experienced had a patient who couldn't undergo an MRI scan due to a metal implant”
- “How far do you think the risks outweigh the benefits when using radiation for medical treatment?”
- “Can you weaponise your research?”
- “How do you feel when you see people recovering from cancer?”
- “How confident are you with your work?”
- “If you could change one thing about your job, what would it be?”
- “Where does the radiation for your machine come from?”
- “Will human aggression end human existence? If not, what will?”
- “Where did cancer develop from?”
- “What is your research aiming to achieve/find out?”
- “How does the magnetic fields and radio waves transform into a scan on a screen in relatively simple terms?”
- “Why does radiation not act like a normal ray of light? And also what do you do to stay safe?”
- “Why is hair loss a side effect of chemotherapy?”
- “What do you know now that you wish you had known when you were in school?”
- “What is your favourite element and why?”
- “What is your favourite part of medical physics?”
- “If someone consumed a high amount of iron and a room was magnetised, would it kill them?”

## Examples of good engagement

All the scientists were good at engaging and often questioned the students during live chats. For example, Samantha was clear on explaining both the practical reasons for animal testing and her personal feelings:

*“Do you test on them (animals)? If yes what do you test on them?” - Student*

*“I use them in studies to check that the new imaging peptides we want to use in the clinic work and are able to get to tumours and make them light up. What do you make of animal studies?” – Samantha, scientist*

*“I personally disagree with them because I think they are wrong and unethical” – Student*

*“That is interesting. I don't like doing it but it is the only legal way between basic science and going into humans - at least for our type of work” – Samantha, scientist*

Another area of good engagement was how well all the scientists showed their personalities. Glafkos was particularly good at connecting students to his personal story:

*“If there is metal in you, would the buzzers go off in a airport?” - Student*

*“I have shrapnel (little pieces of metals) in my hand. it does go off at some airport” – Glafkos, scientist*

*“Thats so cool!!!” - Student*

*“Not cool when you get pulled over and have to tell them each time that you have it in your hand 😊” – Glafko, scientist*

## Scientist winner: Glafkos Havariyoun

Glafkos' plans for the prize money: *A lot of children visiting our department for a scan are sometimes scared and don't know how it will be. By creating model replicas of our scanners using legos and Raspberry Pi we can show them beforehand what will happen and that will hopefully make their experience better!* Read Glafkos' [thank you message](#).



## Student winner: SianConnell14

For great engagement during the event, Sian will receive a gift voucher and a certificate.

## Feedback

We're still collecting feedback from teachers, students and engineers but here are a few of the comments made during the event...

*“You're all rad!” – Millie, student*

*“I have really enjoyed speaking, we should do it again, u have inspired me” – Young Johnny, student*



**@theolola22** thank u!!! So many questions I would never expect! It's really fun! I can't keep up with the Qs in chat sessions!