2ⁿᵈ **CERN Public Computing Challenge** 2015
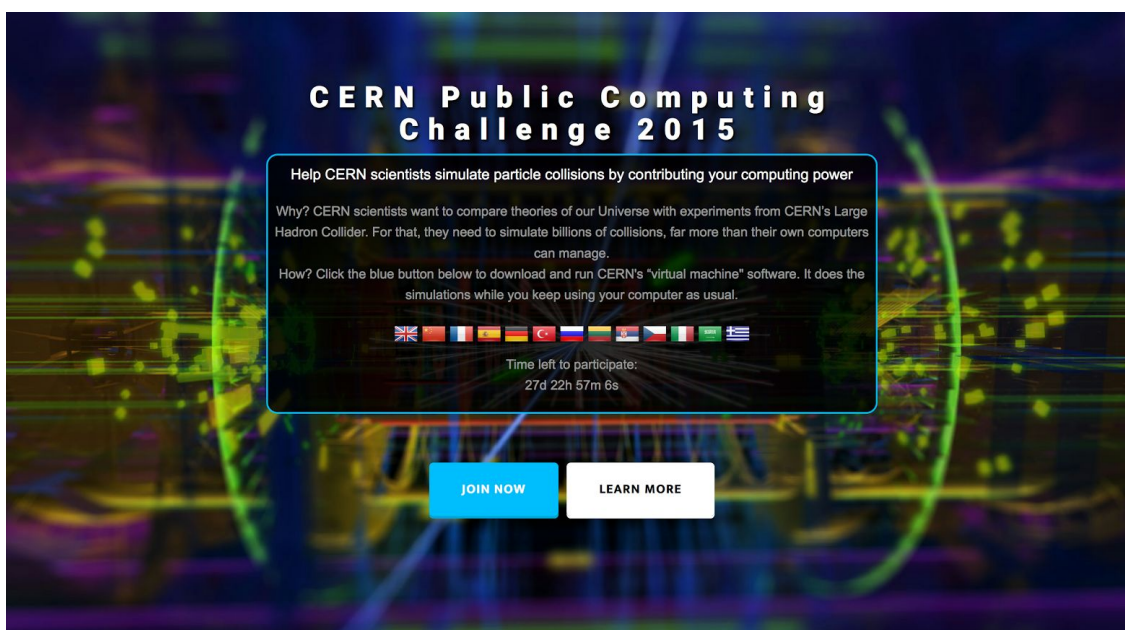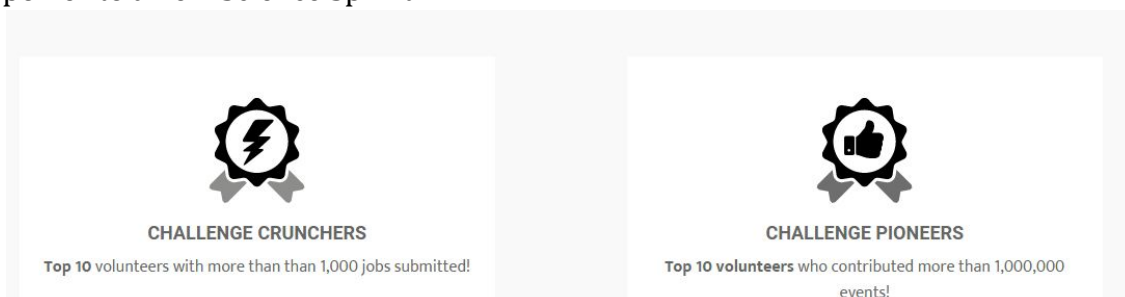
Getting the world involved in science

The first CERN Public Computing Challenge ran for 12 days in December 2014, as part of CERN's 60th anniversary celebrations. We invited volunteers around the world to help CERN scientists simulate particle collisions in accelerators like the [Large Hadron Collider](#) (LHC), using their own computers. The challenge was an opportunity for us to test new, simpler approaches to [distributing](#) such computations, with the help of CERN's own [virtual machine technology](#), CernVM.

Thanks to efforts of the volunteers, we were able to simulate over 19 billion particle collisions. The results are being used in a new educational game called [Virtual Atom Smasher](#). And thanks to detailed feedback from volunteers, we were able to make big improvements in the software used to manage the challenge.

We're running this second CERN Public Computing Challenge for a longer time – a month – to test new technologies and run new types of simulations for the LHC experiments, and even humanitarian research. Every week, you'll be able to compete to become one of the top Challenge Crunchers contributing the most power to a new Science Sprint.

CHALLENGE CRUNCHERS
Top 10 volunteers with more than 1,000 jobs submitted!

CHALLENGE PIONEERS
Top 10 volunteers who contributed more than 1,000,000 events!

For this challenge we need more than just your volunteer computing power. We're relying on Challenge Pioneers to help us engage with new communities and social networks, and achieve a better gender balance, as well as greater linguistic diversity amongst those participating in the challenge. We'll be sharing how we progress towards these goals throughout the challenge on our site. If this sounds like a challenge you'd like to contribute to, then join now!

How to participate

You can easily join the challenge here. Just click the 'JOIN NOW' button!

A small application will be downloaded to your computer, which contains all the required software to join the challenge. This software is configured automatically and can be controlled from the web.
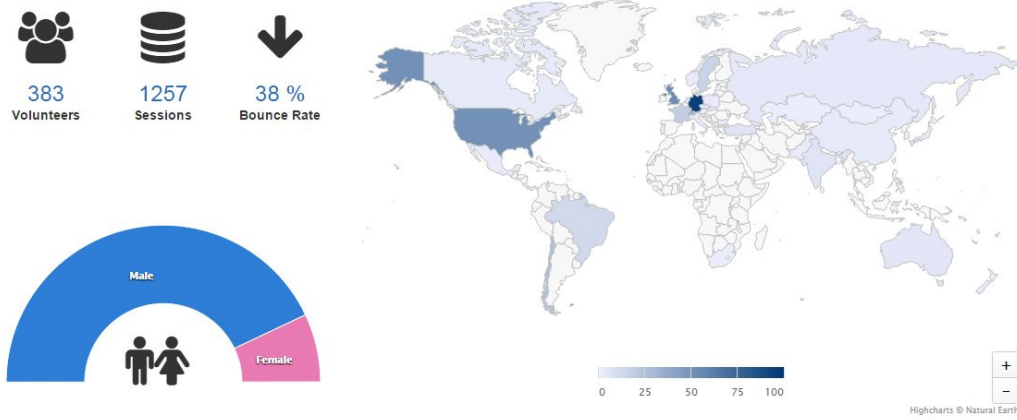

The web interface allows you to adjust the computational resources you want to share to the challenge (e.g. RAM, CPU power, and CPU cores). You can easily pause/stop the participation, or remove the software with a single click from the web.

Additionally, you can see the real time status of the challenge, and the evolution of the challenge in the Challenge Status section.

CHALLENGE STATUS

383
Volunteers

1257
Sessions

38 %
Bounce Rate

Male

Female

0   25   50   75   100

Highcharts © Natural Earth

Top 10 countries (Overall)

Top 10 countries (Female Users)

The CERN Public Computing Challenge is brought to you by the Citizen Cyberlab project and the Citizen Cyberscience Centre.