

Key words: OPC, Observing Programmes Committee, Proposal

ESOcast Episode 116: Success or Failure: How to Get Observing Time	
00:00 [Visual starts]	00:00 [Visuals start]
New ESOcast intro	New ESOcast introduction
[Narrator] 1. Humanity looks upon the Universe with neverending curiosity and wonder. With state-of-the-art telescopes like those at ESO, we can take the most stunning images that the Universe beholds to us. But to astronomers, ESO's telescopes are not just about a pretty picture; they are tools to collect data, through which remarkable discoveries are made.	Celestial images and night-timelapses
00:40[Narrator]2. Observing time on each of ESO's telescopes is highly sought after. Astronomers have to request to use this time by submitting proposals to the OPC.	Astronomers during observations

00:55

3.

Statement Hussain

The OPC stands for the Observing Programmes Committee, and essentially, it's a peer review panel. It's consisting of referees that have been recruited from around the world that have expertise in all the scientific areas that ESO caters for.

Text slate:
Gaitee Hussain
Observing Programme Office, ESO

Statement Patat:

Every semester ESO receives of the order of 900 proposals, submitted by a total of more or less 3500 distinct scientists all over the world from, more or less, 50 countries, and the acceptance rate of course is pretty low, because the competition is strong. Typically, only 1 out of 4 proposals gets to see the telescope light.

Text slate: Nando Patat Head of Observing Programme Office, ESO

Statement Hussain:

It can be difficult to get time on our telescopes, for instance, we have one new instrument that has been offered, called MUSE, and that's one of the most heavily demanded instruments that we have amongst our suite of instrumentation at the moment, so it very much depends on how new it is, and how wide a community it's serving.

Instruments at the VLT

01:58

[Narrator]

4. Twice a year, astronomers gather at the OPC to discuss the proposals. In May 2017, they met for the 100th time, deciding the fate of thousands of astronomers: whether or not they would be granted time on one of ESO's telescopes.

To mark this special occasion, they met in the beautiful Spineto Abbey in Italy.

OPC meeting

02:26

5.

Statement Östlin:

The amount of time available on the telescope compared to the amount of time requested by the observers...there's a big difference, often a factor of five or thereabouts, so there are tough decisions made all the time.

Text slate:
Göran Östlin
Astronomer, Stockholm University

	7
Statement Patat: The most interesting part of my job, I would say, is the interaction with the OPC members, these are very distinguished astronomers from all over the world, so it gives us, and me in particular, a very international view on where astrophysics is going.	
Statement Mohanty: The thing you're really after is, is this really signs that it's going to make a large difference to the way that we perceive this particular topic or sub topic.	Text slate: Subu Mohanty Astronomer, Imperial College London
03:06[Narrator]6. The scientific ideas are sorted into four main themes, so the judges are equipped with the relevant expertise.	OPC meeting
03:17 7. Statement Patat: The first is the extragalactic — distance scales in cosmology; the second which is for formation and evolution of galaxy dynamics; the third one is star formation and planetary systems, including exoplanets; and the fourth one is stellar evolution.	Computer animations
[Narrator] 8. For each theme, there are six allocated experts who discuss each proposal and grade them via a ranking system. The referees read between 70 and 80 proposals each. As the meeting progresses, the different panels eventually come to an agreement. The fate of the astronomer has been seal	Panel discussions at the OPC

04:01

9.

Statement Heymans:

It's really clear the top one or two science projects that people put forward. They really grab everyone's attention, it's really clear those are the ones that we want to do. And then there are the ones that really don't capture our attention and those are clear. But then there are lots of proposals in the middle that are all really really good science, and it's really hard to choose between them because all of them are making major steps forward in their science.

Text slate:

Catherine Heymans
Astronomer, University of Edinburgh

04:25

[Narrator]

10. After the results have been collated and accepted by ESO's Director General, the astronomers are notified and the successful ones prepare for the next stage: observation!

Night-timelapses and astronomers performing observations

Most of the time the support scientists in the control room execute the observations and send the data back to the astronomers, who may be anywhere in the world. Months later, after much analysis and discussion, the results are written up in the form of a paper, assessed in a peer review journal, and eventually published.

05:01

11.

Statement Lopez:

There are also proposals which are so novel in their approach that you have to really be careful that you are not losing something like a future Nobel Prize for instance.

Text slate: Sebastian Lopez

Astronomer, University of Chile

05:14 [Outro]

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