

Citizen scientists needed to discover elusive black holes

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NASA's TESS telescope. Credit: University of Southampton and NASA

Could you help scientists uncover the mysterious world of invisible black holes? Become a Black Hole Hunter and you'll be taking part in scientific research that has the potential to reveal more about one of

space's most intriguing aspects.

All you will need is a smartphone, tablet or other computer, some guidance on how to spot the tell-tale clues, and a bit of time.

By volunteering to take part in this online citizen science project, you'll be assisting astrophysicists Dr. Matt Middleton and Adam McMaster from the University of Southampton, and Dr. Hugh Dickinson from the Open University, with their research into elusive black holes.

Dr. Middleton said, "Black holes are invisible. Their gravitational pull is so strong that not even light can escape, making them incredibly hard to see, even with specialist equipment.

"But that [gravitational pull](#) is also how we can detect them because it's so strong that it can bend and focus light, acting like a lens that magnifies light from stars. We can detect this magnification and that's how we know a black hole exists.

"We know our galaxy is teeming with [black holes](#), but we've only found a handful. You could help us change that."

Volunteers will be asked to search through telescope data and indicate anything that could reveal the presence of a black hole.

Adam added, "Anyone of any age can do this, and you don't need to be an expert to take part. All you really need is an interest in space and as little or as much time as you can give for looking at the graphs and helping us spot the patterns that could reveal a black hole.

"Your work will directly contribute to real [scientific research](#) and you'll be helping to make the invisible become visible."

Black Hole Hunters previously analyzed data from a ground-based telescope but the project is moving on—and up. It's relaunched with a new set of data to analyze from a space-based telescope, called TESS.

Dr. Hugh Dickinson, of The Open University, said, "We're really excited to see the launch of this new Black Hole Hunter project. Using the amazing data from the TESS satellite means that there's a good chance that one or more [citizen scientists](#) will be able to spot one of the elusive gravitational lensing events that we're looking for."

To get involved go to [Black Hole Hunters](#).

Provided by University of Southampton

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