

## ANU astronomers launch public search of the southern skies for elusive 'Planet Nine'

Australian scientists searching the southern skies for a large planet, predicted to be hiding on the edge of our solar system, have released thousands of images for the public to trawl through to pinpoint its location.

Calculations suggest there may be an elusive "Planet Nine" orbiting the Sun far beyond Neptune and Pluto, though it has never been eyeballed by astronomers. Now, scientists at the Australian National University (ANU) are publicly releasing images taken by the SkyMapper telescope at the university's Siding Spring Observatory in regional NSW, in the hopes that Planet Nine makes an appearance. ANU Astronomer **Dr. Brad Tucker** said:

*"The telescope has been doing a digital map of the southern skies, but because it's produced hundreds of thousands of images we're inviting the public, everyone, to access our images and try and find this planet."*

*The project is similar to a public search launched by NASA called Backyard Worlds. The hypothesised Planet Nine remains mysterious, but is projected to be roughly ten times the size of Earth and 800 times further away from the Sun.*

*Scientists had deduced the planet existed after an analysis of Pluto's orbit, which may have been impacted by the gravity of another planet. A calculation, about a year ago, showed that in order to explain Pluto's orbit, if you put this sized planet in this rough position, it makes perfect sense. "Neptune was actually predicted the exact same way ... there's a lot of historical reasons to believe that this sort of thing is actually quite right."*

A website hosting the images presents participants with images of objects moving through space over time, in the hopes of finding movements that match Planet Nine's proposed characteristics. ANU observations of the southern skies could contain glimpses of Planet Nine.

Dr Tucker said using the website was simply a "Spot the Difference".

*"What you should see is a red, blue or green dot object that has moved across the image over time."*

*If you see it, you say 'yes' and then you 'click' the position, then the system will do some calculations and figure out if it's on a good orbit - if it could be this planet. The website will send it to us, and we will follow it with our telescopes at Siding Spring and all around the world."*

While the dataset is massive, and will contain thousands of asteroids and other celestial bodies, scientists hope to churn through high probability areas in a week and the complete the data-set over several months. Dr Tucker said:

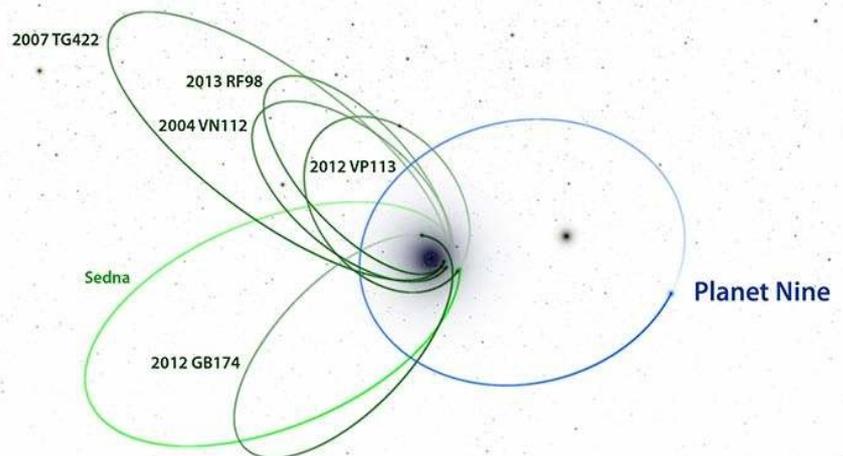
*"The planet could exist in one probable area, and that area we hope to get through in a week. But it doesn't just end in a week or two, it's going to be a couple of months, but the bulk of it we hope to plough through really quick."*

The project will be launched this week by **Professor Brian Cox** as part of the BBC broadcast Stargazing Live.

An Australian version of Stargazing Live will be broadcast from Siding Spring Observatory next week on ABC TV.



It is suggested the planet is around ten times the mass of Earth



Proposed orbit of Planet Nine amongst the outer objects in the Solar System