

Science raises weighty question with travelling gnome

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A collection of gnomes in Sydney, Australia. Physicists looking at anomalies in Earth's gravity have turned to a garden gnome named Kern, which has been shipped around the globe to have himself weighed at locations ranging from Lima, Mumbai and Mexico to Sydney, New Caledonia and the South Pole.

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The experiment is a twist on the "travelling gnome" prank, in which a garden ornament is mysteriously stolen, photographed at various locations -- with the pictures posted on the Internet -- and then returned home.

The project promotes the wares of a German maker of hi-tech scales, but also has a serious application, by measuring differences in Earth's gravity that also affect weight.

"Most people don't realise Earth's [gravity](#) actually varies slightly," experiment coordinator Tommy Fimpel said in a press release.

"One of the main causes is variations in the shape of the planet. Believe it or not, the Earth is actually potato-shaped, so you'll weigh up to 0.5 percent more or less, depending on where you go. We thought our Gnome Experiment would be a fun way to measure the phenomenon."

Scientists who take part in the project receive a flight case that comprises Kern, of which only one has been made, plus a set of precision scales.

So far he has weighed most -- 309.82 grammes (10.9285 ounces) -- at the Amundsen-Scott Research Station in Antarctica, where the inertial pull produced by Earth's rotation is strong.

His next stops are Snolab, a Canadian [particle physics](#) facility two kilometres (1.2 miles) below the surface of the Earth that is the deepest laboratory in the Earth, and the underground Large Hadron Collider, the famous particle smasher at [CERN](#) in Switzerland.

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