



# A Hot Discovery of Some Cold Planets

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A brand new telescope that is still being built, called ALMA, has already made its first discovery! It has spotted two planets orbiting the star shown in this photograph, which are among the coldest planets ever found.

ALMA doesn't look like a normal telescope. When it is finished next year, it will be a group of 66 dishes that look similar to the satellite dishes that are installed on the sides and on top of houses to pick up TV signals. But ALMA's dishes are about 12 times bigger and they aren't tuned for the radio waves used to send TV programmes. Instead, they are designed to pick up a different type, called sub-millimetre waves.

These waves allow astronomers to study extremely cold stuff in space, such as dust. This is exactly what the astronomers needed to make the new discovery! The planets were found because their gravity has shaped a cloud of cold dust into a giant ring that circles around the star.

Only about a quarter of ALMA's 66 dishes were ready to use when the astronomers discovered these planets. "ALMA may be still under construction, but it is already the most powerful telescope of its kind," says Bill Dent, one of the astronomers reporting the new discovery.

## COOL FACT

The frosty conditions on the planets is because they are about 140 times further from their star than the Earth is from our Sun!

This Space Scoop is based on a Press Release from [ESO](#).

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