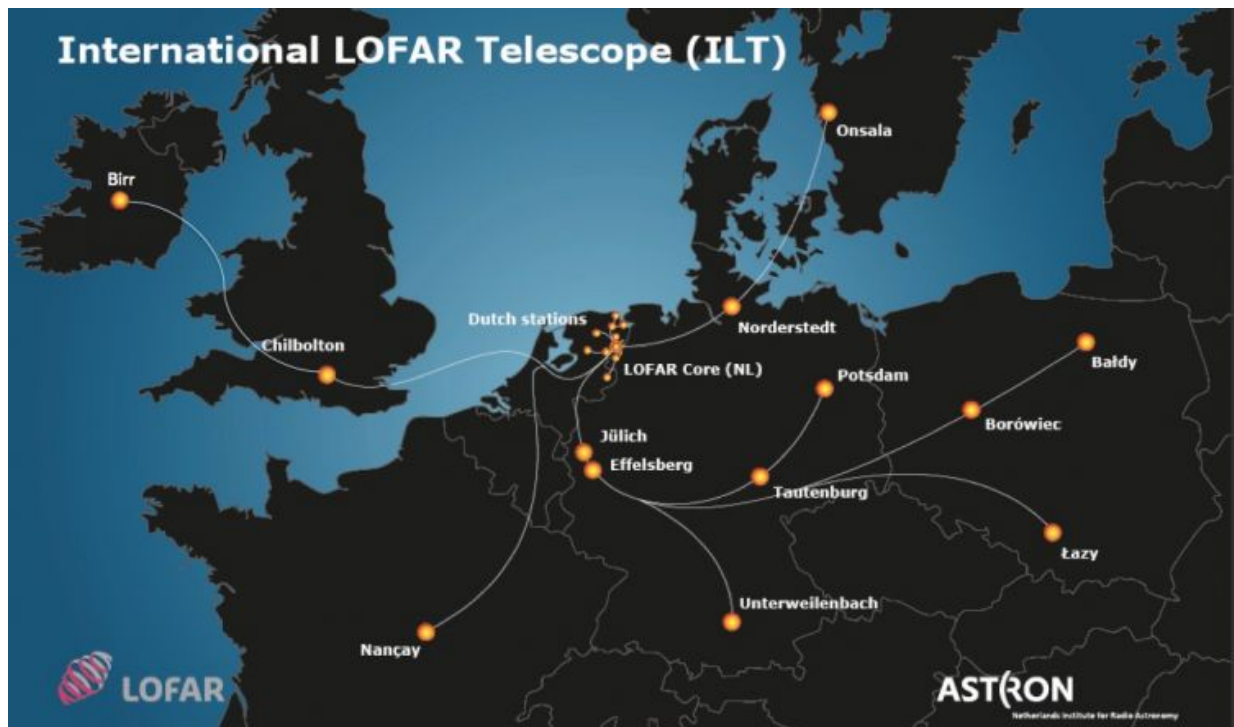


# Low Frequency Array Ireland officially launched

July 28 2017



Credit: ASTRON Netherlands Institute for Radio Astronomy

On 27 July 2017, the newly built Low Frequency Array (LOFAR) station in Ireland will be officially opened. This extends the largest radio telescope in the world, connecting to its central core of antennas in the north of the Netherlands, now forming a network of two thousand kilometres across. Astronomers can now study the history of the universe

in even more detail. The station will be opened by the Irish Minister for Training, Skills, Innovation, Research and Development, John Halligan.

The international LOFAR telescope (ILT) is a European network of [radio antennas](#), connected by a high-speed fibre optic network. With the data of thousands of antennas together, now including the Irish antennas, powerful computers create a virtual dish with a diameter of two thousand kilometres. The telescope thus gets has an even sharper and more sensitive vision.

Rene Vermeulen, Director of the ILT, is very excited about this new collaboration. "Thanks to the new LOFAR station in Ireland, we can observe the universe in even more detail. For example, we can look more closely at objects near and far, from our Sun to black holes, magnetic fields, and the emergence of galaxies in the early Universe. These are important areas of research for astronomers in the Netherlands and other ILT partner countries."

The Irish LOFAR team is led by Professor Peter Gallagher (Trinity College Dublin), an expert on Solar astrophysics. Vermeulen: "Studying the Sun, including solar flares, is an important branch of astronomical research. In this and other areas Irish researchers bring important reinforcement to our partnership."

## Successful tests

LOFAR was designed and built by ASTRON, the Netherlands Institute for Radio Astronomy. Earlier this month, a team from ASTRON conducted the final delivery tests of the Irish [station](#) on the Birr castle estate. The antennas, which conduct measurements at the lowest frequencies that can be observed from the earth, perform according to specification. The fibre optic [network](#) has already been successfully connected to the supercomputer in the computing centre in Groningen,

which combines the data of the thousands of antennas.

Provided by ASTRON Netherlands Institute for Radio Astronomy

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