

JUMPING JIVE: a global leap for the European VLBI Network

Twelve institutes from 8 different countries have teamed up in the JUMPING JIVE project, which was awarded nearly 3 million euro by the Horizon 2020 Framework Programme of the EU for the next 4 years. The project is led by JIVE, the Joint Institute for VLBI ERIC, located in Dwingeloo (the Netherlands). February 21 marks the official start of the project with a kick-off meeting in Leiden, where all partners will discuss the implementation of the project.

Over the past decades, JIVE and the European VLBI Network (EVN) have built a strong tradition of innovation in the field of Very Long Baseline Interferometry (VLBI). With this technique, astronomers can use telescopes thousands of kilometres apart to study radio sources with extremely high resolution. Over the 23 years of its existence, JIVE has pushed the scientific capabilities of the EVN, and has become a centre of excellence in supporting scientists from around the world. Two years ago, JIVE made the transition into a European Research Infrastructure Consortium (ERIC). This new, European legal entity qualifies JIVE as an excellent Research Infrastructure provider for European astronomers, and this should lower the threshold for new member countries to join.

In the context of JUMPING JIVE (“Joining up Users for Maximising the Profile, the Innovation and the Necessary Globalisation of JIVE”), the prioritisation of new VLBI capabilities will be discussed with input from scientists involved in a wide range of astrophysical subjects. The process will bring together European and global experts to define the necessary technical innovation based on the scientific requirements.

The programme also provides resources for the integration of new telescopes into the existing network, expanding the functionality of the EVN correlator at JIVE, and the further development of operational interfaces and software. The JUMPING JIVE project aims to contribute towards a truly global VLBI facility, advancing radio astronomy, but also geodesy and space science VLBI applications. Important for this are the establishment of new interface standards that are ready for global use.



Moreover, it is expected that in the next decade, the Square Kilometre Array (SKA) can make a powerful addition to the global VLBI network. Therefore, the project will include a dedicated SKA-VLBI scientist to engage with the SKA organisation and prepare for joint observations. JUMPING JIVE also supports the development of the African VLBI Network (AVN) project, for which communication dishes in Africa are being refurbished for radio astronomy. These additional telescopes on the African continent will be a significant boost to the sensitivity and resolution of any global VLBI network, especially for targets in the Southern celestial hemisphere.

Important in all the work packages will be communicating the mission of JIVE and developing new collaborations with existing and new partners. JIVE is happy to welcome Francisco (Paco) Colomer (Project Manager/Policy Officer) and Gina Maffey (Communications Officer) to the JIVE team.



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