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## Forbes Recognizes Innsbruck Physicist

**Innsbruck is a place that attracts the most intelligent thinkers in Europe. One of these bright minds, Jordi Prat-Camps, has just made it onto the American economic magazine Forbes' 30 Under 30 Europe lists of ground-breaking leaders. The physicist, a graduate from Barcelona, started working as a researcher at the Institute for Quantum Optics and Quantum Information (IQOQI) in Innsbruck last year.**

A high-profile jury hired by Forbes magazine chose the most illustrious young people in 20 fields such as media, finance, sports, music, marketing, and science etc. for their 30 Under 30 lists. In the beginning of January, Forbes published the list for the USA for the fifth time. Now it has published the first-ever Forbes 30 Under 30 recognizing Europe and Asia's outstanding young people. Among the thirty chosen ones in the field of science and healthcare is theoretical physicist Jordi Prat-Camps. Ever since Jordi Prat-Camps was little he has wanted to dedicate his life to inventing things. After graduating from the Autonomous University of Barcelona in Spain he has certainly been living out his dream. For example, together with his research colleagues he developed an invisibility cloak for magnetic fields. This is the first device that makes a region of space invisible to magnetic fields.

### **Construction of a magnetic wormhole**

Prat-Camps research focuses on magnetic fields and magnetic metamaterials. Their permeability for magnetic fields is artificially modified, which makes them suitable for constructing magnetic hoses, for example. These materials engineered by Prat-Camps and his colleagues allow the transfer of static magnetic fields between points in space, which is comparable to fiber glass cables. Another project that sounds like science fiction is the construction of a magnetic wormhole. This device transfers the magnetic field from one point in space to another through a path that is magnetically undetectable.

These innovations could have very down-to-Earth technological applications, such as improving magnetic resonance imaging or wireless energy transfer. Prat-Camps has already submitted two patents. Since 2015 Jordi Prat-Camps has been disseminating his ideas in Oriol Romero-Isart's research group at the IQOQI. One of the projects the scientists at the Institute for Quantum Optics and Quantum Information of the Austrian Academy of Sciences in Innsbruck work on is the control and investigation of quantum systems by magnetic fields. Their goal is to develop a fully magnetic processor for quantum information.

Forbes 30 under 30: <http://www.forbes.com/30-under-30-europe-2016/>

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