## **Ronald Hanson wins Physica Prize 2022**

The Physica Prize 2022 has been awarded to Ronald Hanson, distinguished professor in quantum computing and quantum internet at TU Delft and group leader at QuTech. He deserves the prize for several reasons.

First of all, Ronald Hanson carried out outstanding scientific research on quantum control and quantum entanglement. In 2015, his team succeeded to entangle two electrons on a distance of more than a kilometer. Three years later, his team was able to generate quantum entanglement faster than it got lost.



Besides being an excellent researcher, Ronald Hanson played a key role in uniting the Dutch quantum physics community into a joint vision and plan (National Agenda Quantum Technologies), and in securing funding for executing this agenda from the National Growth Fund.

Ronald Hanson earned world-wide recognition as one of the leading quantum scientists of his generation. This means that the Physica Prize is not the first prize he wins, e.g. the Spinoza Prize 2019 was awarded to him as well. Ronald's research centers on exploring and controlling quantum-entangled states with the long-term goal of exploiting these in future quantum technologies such as quantum computing and quantum internet. He regularly publishes groundbreaking results in leading magazines like Nature and Science, results which are picked up by the media quite often. Hanson strongly believes in the importance of science communication and outreach activities to the general public and society.

Quantum technology enables complete new products and services. The expectation is that for instance quantum computers are able to do things that 'classic' devices are not capable of. Think of calculating molecules and materials. Ronald currently chairs the Executive Board of Quantum Delta NL, the foundation responsible for the National Agenda Quantum Technology. This agenda aims at positioning the Netherlands as an international leading center and node for quantum technology: the Quantum Delta NL.

Annually, the Physica Prize is awarded to an eminent physicist, who is active in the Netherlands. A jury awards the prize after consultation of several representatives of the Dutch physics community. The jury comprises of the president of the <u>Netherlands' Physical Society</u>, the president of <u>Foundation Physica</u> and a former laureate.

Hanson receives the prize at the conference <u>FYSICA 2022</u> on Friday April 22<sup>nd</sup>, when he will give the Physica Lecture. As he is known as outstanding speaker and communicator, we are looking forward to that moment! The <u>Nederlands Tijdschrift voor Natuurkunde</u> pays attention to Ronald Hanson's research in the editions of March and May 2022.

Picture Ronald Hanson made by Bob Bronshoff