

DISPERSE investigates solutions for MRI scanning of patients with multiple implants

A project in the EUREKA PENTA programme

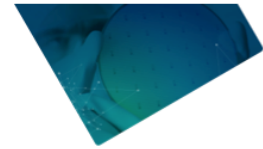
Paris, January 18, 2018. The PENTA funding programme, managed by AENEAS, today highlights the DISPERSE project. This project aims to extend Magnetic Resonance Imaging (MRI) scanning to people who currently cannot benefit from this non-invasive technique due to multiple medical implants in their body.

With an aging population, ever more people with implants are likely to require medical scans for conditions such as cancer, neurodegenerative and musculoskeletal diseases. Today, many such patients cannot have MRI scans because their medical devices significantly distort images. Some patients with what are known as 'conditional implants' can have MRI scans, but the scan time is longer than normal. With the use of photonics, micro-electronic devices and innovative packaging solutions, the DISPERSE project is seeking to overcome these limitations and allow patients with multiple implants to be scanned in much faster and more accurately.

The project is also developing innovative techniques to monitor patient anxiety during the exam. An acoustic system based on multiple microphones detects patients' reactions in order to trigger adjustment of the operator workflow. In addition, this acoustic monitoring (enabled by integrated photonics) has the potential to be used in detection and surveillance systems in smart cities, smart homes and automotive applications.



Photo credit: Philips



About the PENTA programme (managed by the AENEAS Industrial Association)

PENTA is a EUREKA cluster whose purpose is to catalyse research, development and innovation in areas of micro and nanoelectronics enabled systems and applications - where there is shared national and industrial interest. Based on three key application areas, Transport & Smart Mobility, Health & Well-Being and Digital Industry for the first 3 calls, PENTA programme contributes to the development of electronic solutions with the opportunity for rapid competitive exploitation and a strong impact on European societal challenges. The PENTA project team is supporting SMEs, large corporations, research organisations and universities by facilitating access to funding, fostering collaborative work and creating consortia.

PENTA is managed by AENEAS, the European industry association.

About PENTA: <http://www.PENTA-eureka.eu>

About AENEAS: <https://aeneas-office.org>

About the DISPERSE project

DISPERSE is a RD&I project consortium involving 12 partners from 3 countries. The project partners are: Philips (project leader), Astron Netherlands Institute for Radio Astronomy, G-Therapeutics, Sorama, Sound Intelligence, Technobis, Cochlear, Gasthuisberg UZ Leuven, Luceda Photonics, MinDCet, Firecomms, Tyndall National Institute. National funding support is provided by the Netherlands, Belgium and Ireland.

About DISPERSE: <http://disperse.eu>