

PRESS RELEASE

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International Radar Symposium IRS Celebrates 20th Anniversary in Bonn

Every year, experts from around the world exchange the newest insights in radar research at the International Radar Symposium IRS, opening up this promising technology for modern applications such as autonomous driving. In 2018, the symposium organized by the German Institute of Navigation (DGON) and the Fraunhofer Institute for High Frequency Physics and Radar Techniques FHR will celebrate its 20th anniversary in Bonn. The four-day symposium chaired by Prof. Dr. Peter Knott, Executive Director of Fraunhofer FHR, kicked off yesterday with a visit to the institute in Wachtberg und its highly visible space observation radar TIRA.

Radar systems are capable of quickly and reliably detecting the smallest of movements even in great distances and with poor visibility. Thus, they are predestined to provide a higher level of safety in areas such as road, ship, and air traffic, manufacturing and the protection of people. Radar research is continuously making these complex systems smaller, lighter, and more efficient in terms of costs and other resources such as energy requirements, computing power, and storage capacity. Increasingly intelligent sensors that adapt to the individual tasks and relieve the user are also part of the current research.

At the International Radar Symposium IRS from June 19 to 22, 2018, approximately 300 scientists will discuss the complex technology as well as possible applications with more than 150 contributions along with a technical exhibition. Among others, the agenda includes new techniques for signal and data processing. The talks will focus on passive radar – which does not emit any signals by itself, instead using the reflections of existing signal sources like TV and mobile transmitters – cognitive radar, and new methods of signal generation for the precise and effective control of the systems.

Other topics at the symposium will be how radar techniques can be used to improve the detection capabilities of drones and air traffic control, to delivery early and reliable storm warnings in meteorology, or to provide for reliable driver assistance systems, for example. Many technical trends require increasingly precise and intelligent systems. With this, radar techniques are becoming more important both for military as well as civil tasks. The researchers at Fraunhofer FHR and around the world are aiming to make these techniques more usable for businesses, organizations, and thus also for the end user. This is why the date for the next International Radar Symposium has already been set: It will take place in Ulm, Germany, from June 26 to 28, 2019.

More information about the current event: <http://irs2018.dgon-irs.org>

Editorial notes

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FRAUNHOFER INSTITUTE FOR HIGH FREQUENCY PHYSICS AND RADAR TECHNIQUES FHR

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As one of Europe's leading institutes, the **Fraunhofer Institute for High Frequency Physics and Radar Techniques FHR** conducts extensive research in the area of high frequency and radar technology. Its core research focuses on sensors for precise distance regulation and positioning as well as imaging systems. The applications range from systems for reconnaissance, surveillance, and protection to real-time capable sensors for traffic and navigation as well as quality assurance and non-destructive testing.



Captures:

Left: Radar researchers from around the world visited Europe's largest radar research institute, Fraunhofer FHR in Wachtenberg with its space observation radar TIRA, at the start of the International Radar Symposium IRS in Bonn.

Right: How small radar modules such as the MIMO radar of Fraunhofer FHR can be used for the three-dimensional high-resolution monitoring of the environment is only one of the many fields of research that will be discussed at the International Radar Symposium IRS in Bonn from June 19 – 22, 2018.

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