

# Welcome address by the rector

The new **THEMENHEFT FORSCHUNG** is dedicated to one of the outstanding research fields of the Universität Stuttgart – Photonics. It is well known: light matters in Stuttgart. The interaction of basic quantum optics research, applied photonics, material sciences and mechanical engineering is a unique advantage of the photonics research at and around the Universität Stuttgart. There are hardly any other centres with a comparably versatile, interdisciplinary and complete pervasion of photonics research activities – not only in Germany but also worldwide.

The clustering and the accentuation of all the photonics activities around the Universität Stuttgart is a strategic goal of both the university and the ministries of Baden-Württemberg and shall feature distinct emphasis on the transfer of photonic technologies into engineering and manufacturing.

The Universität Stuttgart will expand teaching on optical sciences with an own Master degree on optical engineering. The promotion of young scientists will additionally be supported by the implementation of a graduate school focused on the phenomena of light-matter interactions.

An important premise for a sustainable growth of photonics is a competitive research excellence from basic science to application-oriented engineering that strategically generates the innovations needed for the future of our economy.

This holistic approach could not be fully represented in our **THEMENHEFT FORSCHUNG**; nevertheless the subject area reaches from the basic research in atom optics, single photon sources and new holograms to the new developments on lasers, silicon based photo detectors or solar cells.

I thank the scientific coordinator, Prof. Graf, and all the authors of our university very much for their contributions and their additional effort for the necessary public understanding of science. My special thanks goes to Berthold Leibinger and his well informed and inspiring words about the future of the scientific region in Stuttgart with regard to optical technologies. •



A handwritten signature in black ink, which appears to read 'Dieter Fritsch'. The signature is fluid and cursive.

Prof. Dr.-Ing. Dieter Fritsch