



The Institut für Strahlwerkzeuge (IFSW) of the University of Stuttgart, founded in 1986, is reputed as one of the leading laser research centers worldwide. Its strength is based on a holistic research approach covering every aspect from laser sources to their applications and ranging from fundamental investigations to industrial technology transfer. The main activities at the IFSW are currently concerned with selected topics in the fields of laser beam sources (especially the thin-disk laser), optical elements and components for beam delivery and beam shaping as well as fundamental investigations on the light-matter interaction with the subsequent process development of macro and micro applications for industrial manufacturing.

Within our laser development and laser optics activity we aim to develop, in the frame of a DFG project, a high-power and high-efficiency frequency-doubled thin-disk laser oscillator operating in a switchable mode to emit multimode ($M^2 < 12$) or fundamental mode ($M^2 < 1.5$) at a central wavelength of 515 nm.

The ultimate objective will be to design and implement, together with other members of the team, an Yb:YAG thin-disk laser resonator which includes a polarizing grating mirror coupled to several actively-regulated deformable mirrors and a non-linear SHG crystal (LBO) to achieve kW-class of output powers. The laser system shall be switchable between multimode and single transverse mode.

For this we are looking for a

Scientist / PhD student (m/f/d)

You want to work on a challenging scientific project and you have an above-average degree and preferably some knowledge and hands-on experience in optics, diffractive optics, lasers physics and non-linear optics.

The payment will be according to TV-L 13 (100 %) plus the usual benefits. The position offered is limited to three years.

Application deadline is **31.03.2024**

Please send your application to:

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