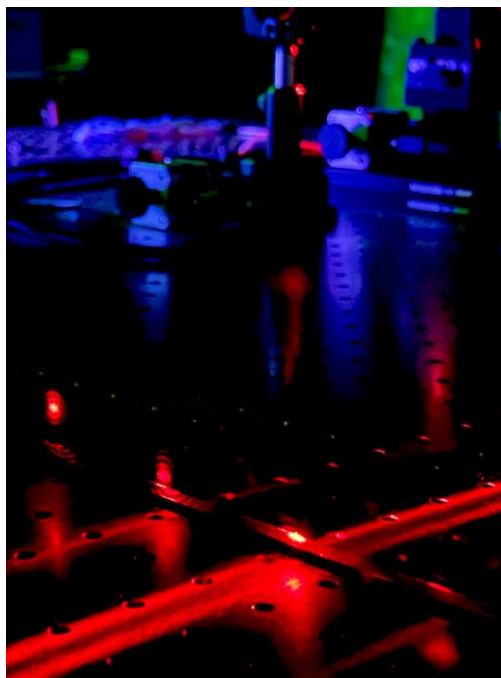# Development, assembly and testing of an innovative lightweight mirror concept

Project Type: Student Project

Duration: 3 months

Location: Institut für Produktentwicklung und Gerätebau (Gebäude 8143)

An der Universität 1, 30823 Garbsen

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SCRAMBLUX is a German Startup company. We want to deliver key technology for Advanced Driver Assistance System (ADAS) and Autonomous Driving markets.

Our patented solutions allows for testing of LiDARs in a new type of instrument, which saves the customer a lot of costs.

LiDAR is one of the most important sensors for automated driving. A LiDAR is a laser sensor, which can produce a 3D (point cloud) image of whatever is in front of it. This is very important for AI and Automated Driving. It allows AI to make better and faster decision than only with a Camera or a Radar.

To advance our technology and deliver excellent solutions to our customers, we are looking for ambitious Master students, to participate in our product development.

Project Description

Participate in advancing LiDAR testing technology for ADAS and Autonomous Driving. This project aims to develop, build and test an innovative lightweight mirror concept. The project involves conducting a comprehensive literature and market review of existing mirror technologies, designing and 3D printing a mechanical stretch and mount mechanism. You will perform optical performance experiments to evaluate the mirror design. Additionally, the project includes mechanical and thermal performance analysis to evaluate the influence of changing environment on the system.

Skill Requirements

You should have excellent knowledge of mechanical engineering and feel comfortable with working in CAD and 3D printing components. You should have experience in lab work.

The project will be conducted at IPeG in Garbsen and jointly supervised with an IPeG employee.