COMPANY INTRODUCTION

www.lf-t.net

LAKE FUSION Technologies
LFT

SUMMARY

LFT is a German based international deep tech software and technology company.

LFT's USP are safety relevant environmental perception solutions for vehicle, ground, airborne and stationary applications.

Key shareholder

1. LLHC (owner of SES LLC in Huntsville)

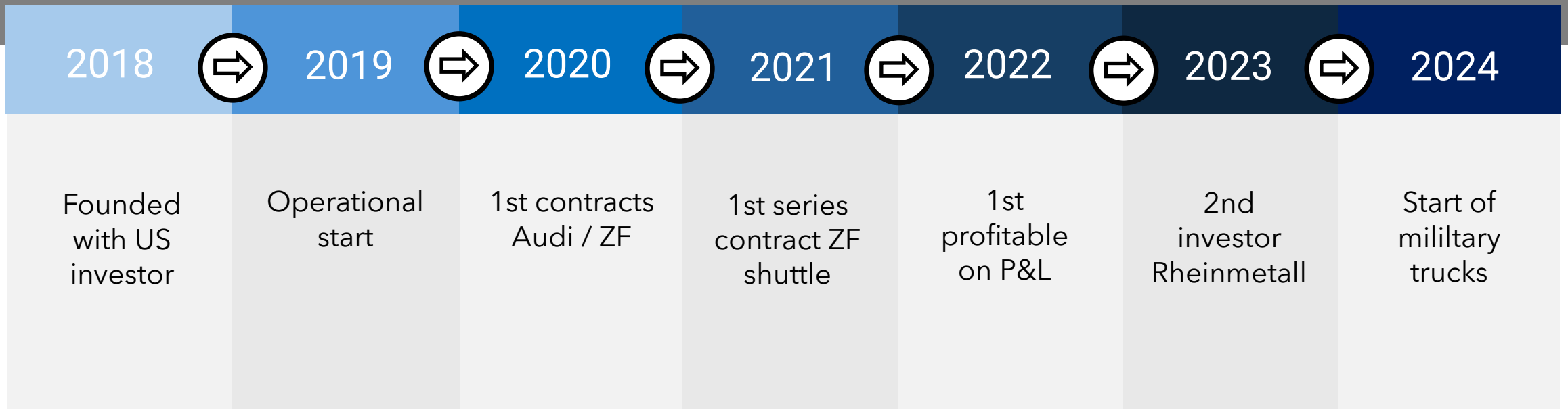2. Rheinmetall Technology Center

3. Dr. Eckhard Cordes

LFT growth strategy includes:

- New environmental perception products for airborne, on road, offroad, sites, maritime and production areas

- Penetrating global markets to expand proven technology into aerospace, automotive, and spin-off solutions for specialty applications

Our Milestones

LFT provides data **FUSION** & processing **Technologies** for Environment perception for autonomous systems

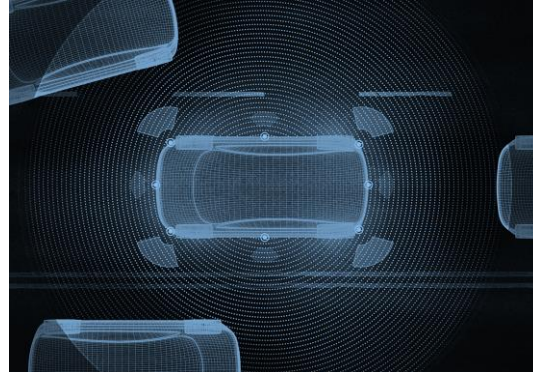CORE USP: LiDAR rule-based algorithm Safeguard of perception systems

2018	2019	2020	2021	2022	2023	2024
Founded with US investor	Operational start	1st contracts Audi / ZF	1st series contract ZF shuttle	1st profitable on P&L	2nd investor Rheinmetall	Start of mililtary trucks

2009 - 2018 ⇨ **2019** ⇨ **2022** ⇨ **2024** ⇨

Background	Automotive	Airborne	Security

Aviation
with a long substantial experience
in **LiDAR**

Safeguard of environmental perception
for AD systems - **Safeguard AI**

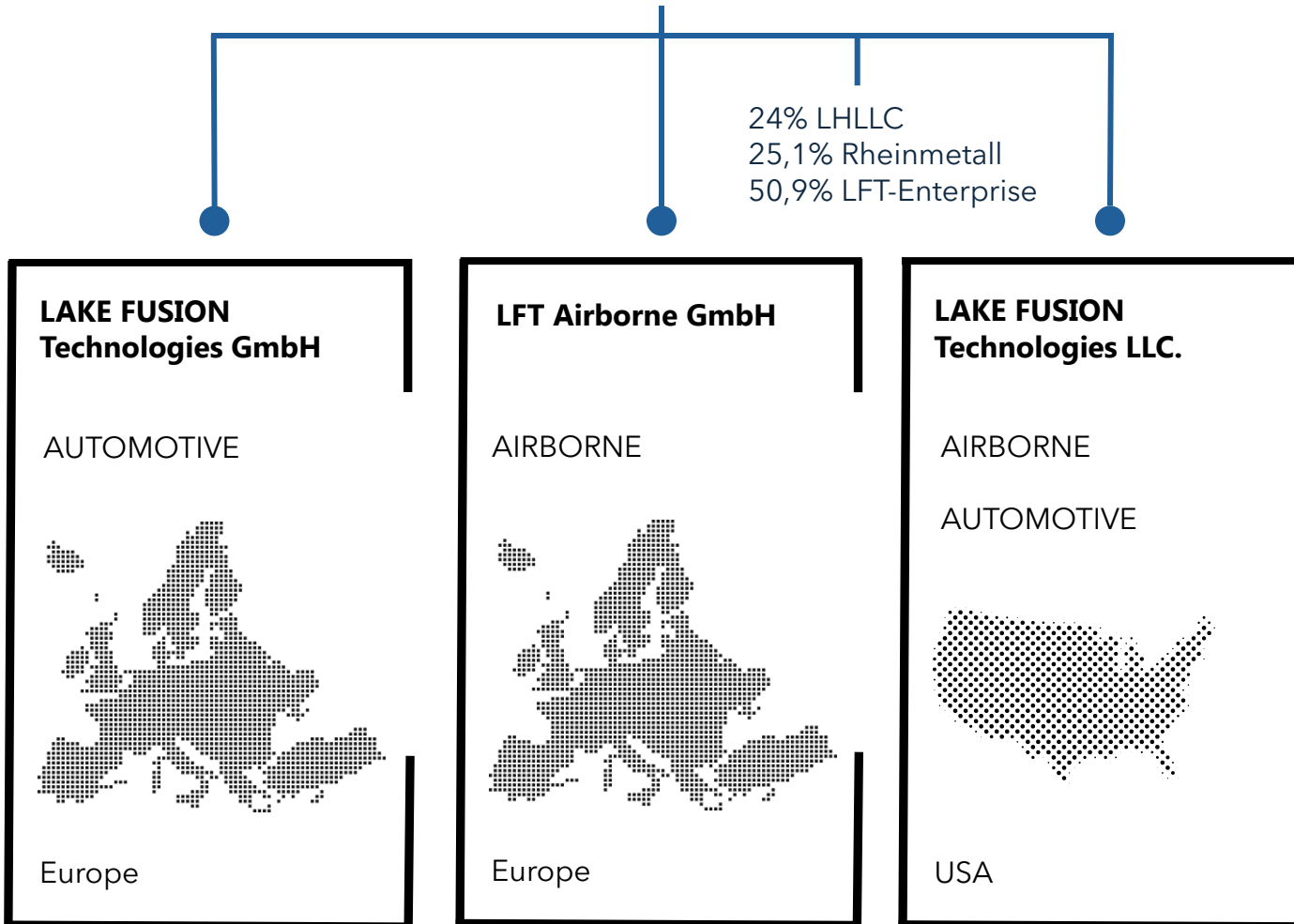**Laser-based-Situational awareness**
around the helicopters

Object detection high reliable environmental recognition
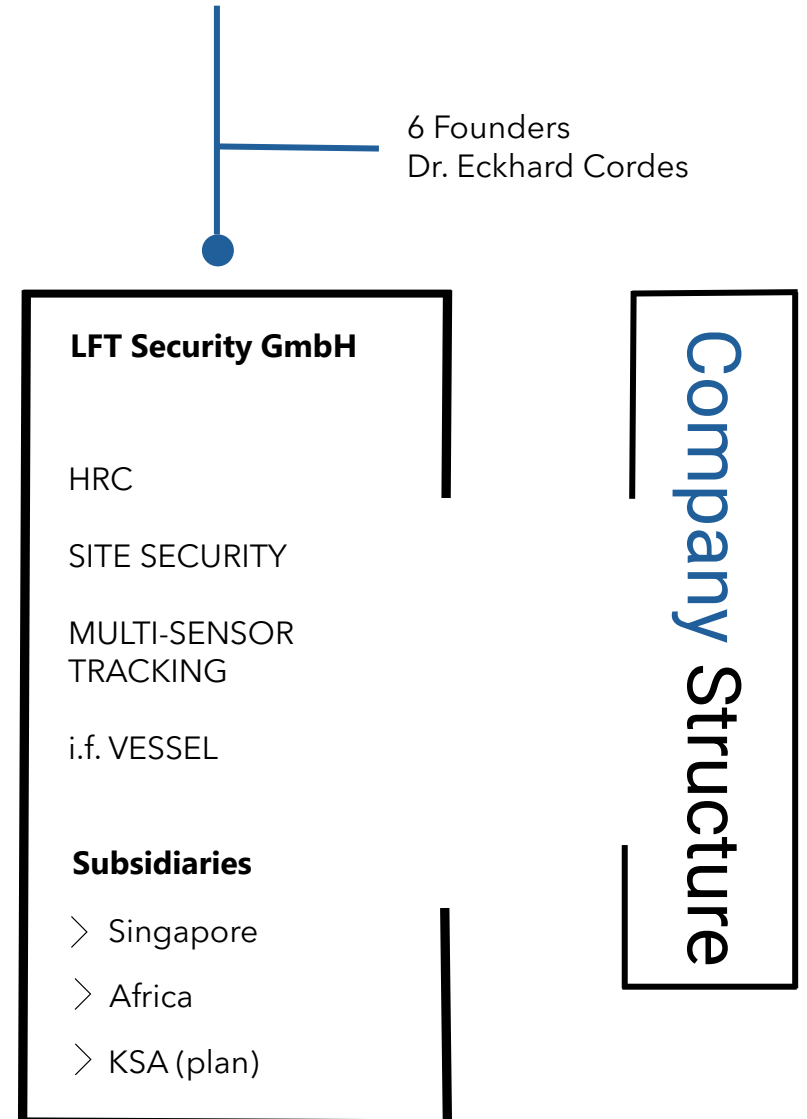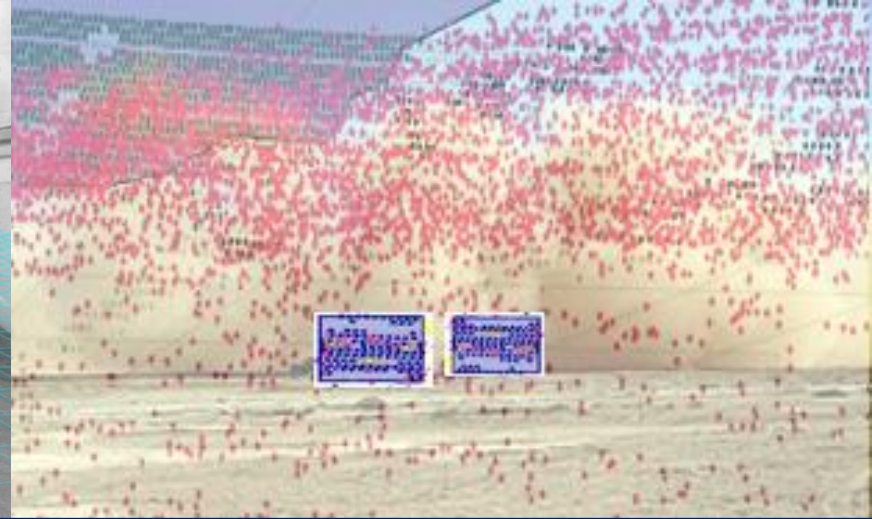
Story
About Us

LFT's Locations

LAKE FUSION
Technologies

Markdorf, Ger (HQ)

Karlsruhe, Ger

LAKE FUSION
Technologies LLC.

Los Angeles, CA

LAKE FUSION
Technologies LLC.

Huntsville, AL

LAKE FUSION
Technologies

Singapore, Pte. Ltd.

Saudi Arabia

LFT Africa
Marocco

LFT Holding GmbH

24% LHLLC
25,1% Rheinmetall
50,9% LFT-Enterprise

LAKE FUSION Technologies GmbH

AUTOMOTIVE

Europe

LFT Airborne GmbH

AIRBORNE

Europe

LAKE FUSION Technologies LLC.

AIRBORNE

AUTOMOTIVE

USA

LFT Enterprise GmbH

6 Founders
Dr. Eckhard Cordes

LFT Security GmbH

HRC

SITE SECURITY

MULTI-SENSOR TRACKING

i.f. VESSEL

Subsidiaries

> Singapore
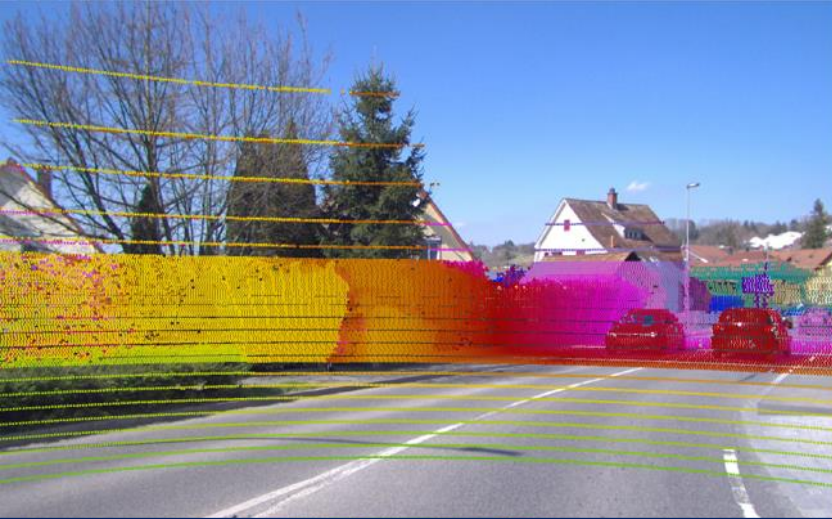
> Africa

> KSA (plan)

Company Structure

What
We Do

LiDAR based safety-critical environmental perception

	Ground Vehicle	Autonomous driving onroad / offroad
	Airborne	Pilot assistance for obstacle detection (Helicopter / Drone)
	Security	Object detection high reliable environmental recognition
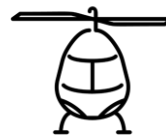
Our Service

LiDAR validation

LFT........

---------BITTE-----------------------

-----VERVOLLSTÄNDIGEN-----

Safety consulting

LFT provides safety-critical ASIL-approved environment detection software with the focus on LiDAR sensors

Reference measurements

LFT ....

---------BITTE----------------------

-----VERVOLLSTÄNDIGEN-----

Our Values

Mission

LFT --------------------------

....

Quality

LFT provides ongoing consistency checks:

....

Innovation

LFT --------------------------

....

Cooperation Partners
Airborne

RHEINMETALL

ÖAMTC

elix

swiss
helicopter +
engineering

Customer Contracts

GROUND VEHICLE – SAFEGUARD OF AI

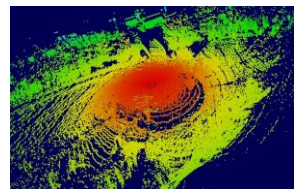Autonomous driving in public road traffic
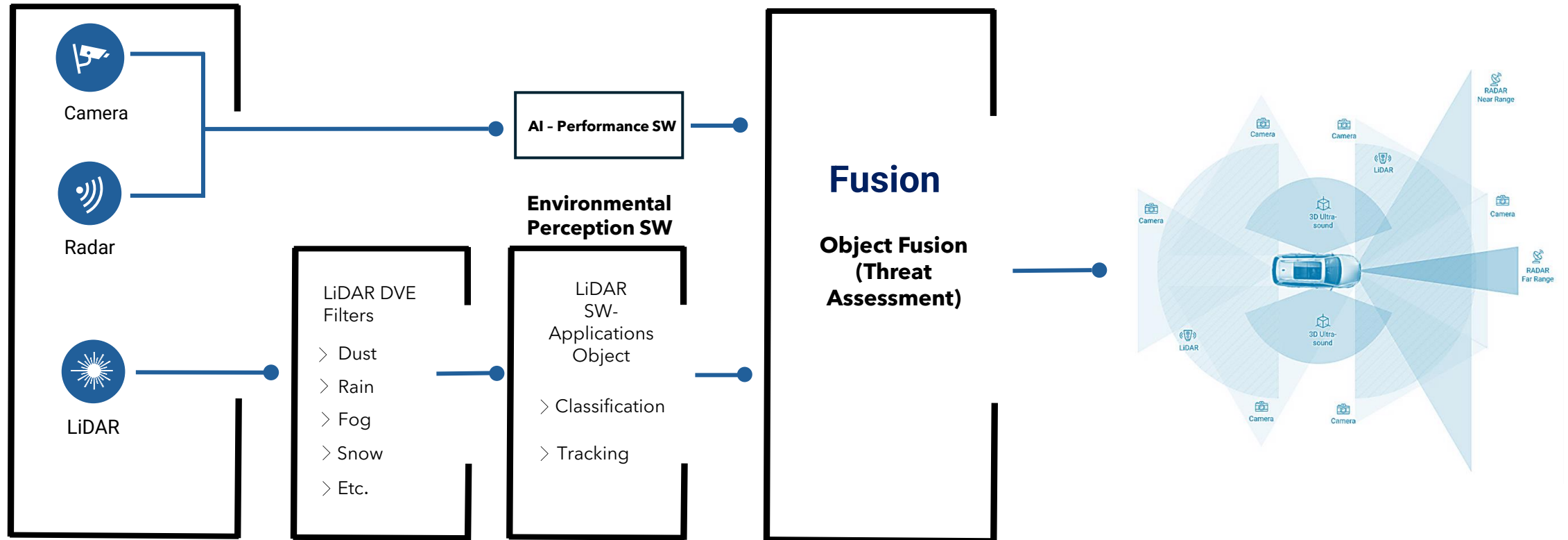
Is AI safe enough?

Safe environmental perception is required!

LFT's Solution ———

> Multimodal sensor suite and safety monitoring is a prerequisite for a complete provision of the „intended function".
>
> (e.g. autonomous driving)

> Fusion processes are required for the functional safeguarding.

Our Safety KIT

Safety KIT Video

LiDAR processing results overlaid over video - frame 330

LiDAR perception processing (single frame) – freespace and clusters: Test 2020-05-14

LiDAR Validation

More than 93 LiDAR sensors

are already tested

In real world scenarios

- Integration of LiDAR-Under-Test on LFT reference system

- Recording and analysis of typical scenarios under different ambient conditions sun, rain, snow

- **Qualitative evaluation** of detection ranges, intensities, noise levels, artefacts, homogeneity, bloomig, ghost images etc.

- **Comparison to reference** LiDARs operating at 905 nm and 1550 nm

In defined conditions

- Calibrated reference targets, flat, spatially structured, mixed reflectivities, mesh fence, etc.

- **Qualitative evaluation** of detection ranges, intensities, noise levels, resolution, homogeneity **over FoV**