Editorial

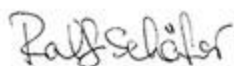## 4th DVN Lidar Conference: A Great, Live Event!

Due to the high Covid counts, it was a close call if we could hold our conference as a live event or not. Fortunately, we were able to safely go ahead under German 2G regulation. We were very happy to welcome about 150 visitors; it was a real pleasure to meet so many of you in person again, and interact in person rather than over video calls and emails.

Participants experienced 26 presentations, two keynote speeches, and two live panel discussions. We had automakers; tier-1s; lidar specialists; component suppliers; testing and equipment specialists; researchers, and analysts. It was gratifying to see the passion and enthusiasm around the topic of automotive lidar. And we saw the same passion with our 21 exhibitors: each break saw great foot traffic through the booths and for networking, and socialising which was finally(!) possible again.

Although it is impossible to capture this conference in a short DVN editorial, we would like to highlight two takeaway points: lidar is growing and becoming more mature; past conferences centred around the *why* of lidar in cars, and now it is more about *how and when*. That's a major shift. And partnerships, standardisation, and neutral and objective testing seem to be important requirements for a higher and faster market adoption.
See below short summaries of the lectures and **click on this link** to see corresponding presentation slides in downloadable .pdf format except for a few speakers whose companies objected to their publication.

With best regards from Frankfurt and on behalf of DVN,

Ralf Schäfer
Senior Consultant to DVN

Leo Metzemaekers
Senior DVN Consultant

In Depth Lighting Technology

28 Lectures at the DVN Lidar Conference: Summaries
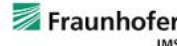
Marelli AL: <u>Frederic Chave</u> · Versatile use of LiDAR modules into Smart Corner and grille

Key figures of the modular approach of Marelli are presented: a true full solid-state lidar, a large range from standalone, to grille and Smart Corner integration, lower development effort and time, and a combination of standard CMOS imager and last generation VCSEL array
The software Marelli solution uses an artificial Intelligence SW developed by a dedicated team inside Marelli organization, a combined deep learning/rules-based approach for redundancy, 3D objects detection and classification

Then the project TINKER is presented: 10 key industrial partners, 3 research institutions, 2 consultancy and service associations from October 2020 to September 2023 with the target to lower weight, power consumption, sensor size and costs, and to improve performance, reliability, safety of ADAS systems.
Timing is Fabrication of RADAR and LiDAR prototypes in 2022 and Demonstration/validation in 2023.

Q&A SESSION 1

Panel 1: Lidar Market and Ecosystem

moderated by Leo Metzemaekers, DVN Senior Consultant

Eight panel members representing Ford, Volvo, ZF, ZKW, Cahrs Training, Marelli, LeddarTech, and Yole discussed the automotive lidar ecosystem. The panel addressed questions of why lidar is essential, as well as technology accelerators, enablers, and roadblocks. The panel compared a competitive (solo) versus cooperative (partnership) ecosystem approach. We saw consensus that partnerships will play in important roles in the further adoption of lidar and that the availability of common test and evaluation procedures will also become crucial.