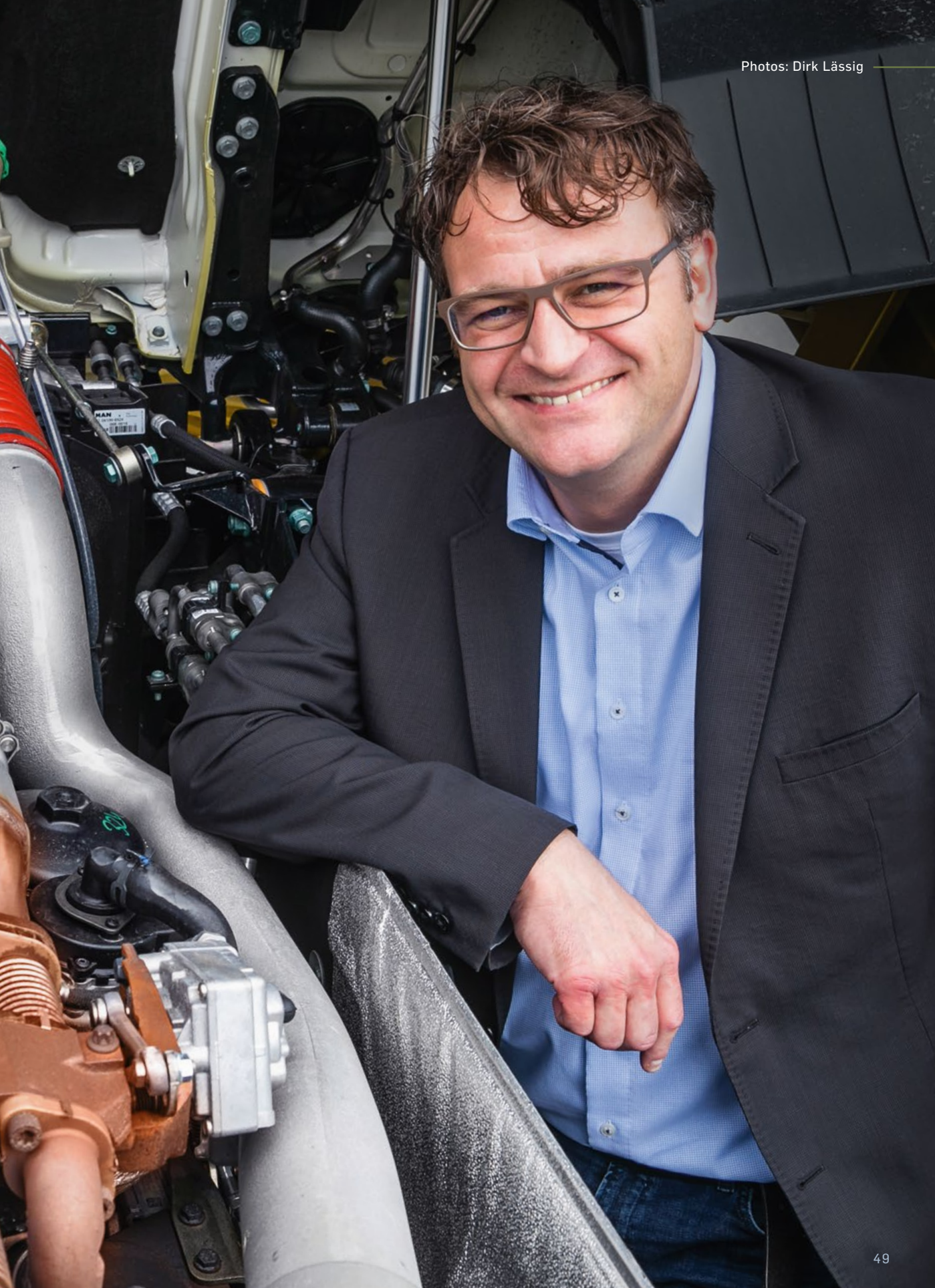


Continuity

Since earning his doctorate with an FVV project, **Dr. Christian Weiskirch** has enjoyed a successful career. Today he coordinates the powertrain development of a large commercial vehicle group – and continues to work for the research association.





Patently creating space for something new // Sometimes there is one decisive moment, and sometimes there isn't. In that case, things develop gradually and at some point, the next step seems obvious. Even in his youth, Christian Weiskirch programmed in BASIC and Turbo Pascal, but also enjoyed picking up a screwdriver and tuning bikes and mopeds, as well as the family's lawnmower. His father let him take care of the house electrical system, even though the main fuse blew several times. He knew he wanted to be an

engineer even before he took his university entrance exams. He chose to study precision engineering at the TU Braunschweig. After gaining his intermediate diploma, Christian Weiskirch worked as a scientific assistant at the National Metrology Institute of Germany (PTB), programmed on behalf of a doctoral candidate and developed an optical micro-sensor as a course assignment, with which he aimed to measure the shape of injector bores – thereby coming into contact with compression-ignition engines for the first time.



»I benefited a great deal from the FVV as a young engineer.«

In his main course of study, Weiskirch increasingly focussed on engines, examined the size distribution of exhaust particles and ultimately decided to write a thesis investigating the ignition aspects of homogeneous diesel combustion. Eckart Müller, who was head of the institute, supported the young engineer but retired in 2003, when Weiskirch was still in the middle of his doctoral project. His position remained vacant until the appointment of Peter Eilts in 2007. Weiskirch acted as deputy for the temporary head, gathering his first management experience alongside his research. »I was really jumping into the deep end,« states Weiskirch. By the time Eilts arrived, the institute was in a good position, as both the number of scientific staff members and the budget of third-party funds had doubled.

Weiskirch earned his doctorate with an FVV project for reducing emissions through homogeneous diesel combustion. It became apparent that a variable compression ratio is required in order to achieve a stable, homogeneous combustion process in a large load range. He encouraged one of his student employees to equip the

single-cylinder research engine with a fully variable valve train – and the engine is still used in different research projects today. Further developments were initiated over the years, with the FVV project being split into a part for cars and a part for commercial vehicles. Discussions in both working groups gave Weiskirch an insight into the two sectors: »The commercial vehicle developers discussed our results far more intensively,« he remembers. »The focus was purely on technology and not on company politics.« Most importantly of all, Weiskirch became a father for the first time during this period. As a father, he realised that he did not want to remain at the university.

He received an offer from IAV, which was expanding its commercial vehicles segment, at just the right time. In 2008, Weiskirch became team leader for the application of exhaust emission control systems for commercial vehicles. The Euro V emission standard had just been introduced for heavy trucks and exhaust emission control systems based on SCR catalysts were becoming the industry standard, yet some actors still relied

solely on exhaust gas recirculation. It took another four years until the Euro VI emission standard became mandatory for heavy trucks. This reduced the limit values for particles by two thirds, and by 80 % for nitrogen oxides. Weiskirch and his colleagues picked up an important Euro VI project at MAN: the large new six-cylinder engines needed to be made ready for the next stage. After a bumpy start, a good collaboration blossomed between IAV and MAN until ultimately the question arose as to whether Weiskirch wanted to join the customer as a department head – a step he took in early 2012. In the subsequent years Weiskirch not only tackled the further tightening of the emission standard, but also addressed the issue that, although engines were becoming ever cleaner, only minor progress was being made in terms of fuel consumption. Weiskirch solved this problem by introducing heavy-duty steel pistons, among other steps.

He also took up his current post without having to write an application. In 2015, Volkswagen integrated the MAN and Scania brands to form a single commercial vehicle group, TRATON. The supervisory board drove forward cooperation talks, among other things regarding the successor to the top-tier 13-litre engine. Weiskirch was a part of the team from the very beginning and quickly established a rapport with his Swedish colleagues, even though there was initially a great deal of mistrust in both companies. »We have always had a rational dialogue among engineers and taken one another seriously.« Weiskirch was appointed to the CTO

office of the new TRATON GROUP at the beginning of 2018. With a handful of employees he coordinates development activities for the entire powertrain – including new topics such as batteries and fuel cells. For more than two years, Weiskirch worked in Södertälje, a small industrial city south-west of Stockholm where Scania has its headquarters, before returning to Germany.

In the FVV, Weiskirch heads the Combustion CI planning group. When asked why he does not delegate his commitment in the FVV despite his career, he responds without hesitation: »I benefited a great deal from the FVV as a young engineer, so it is quite logical to give something back.«



DR.-ING. CHRISTIAN WEISKIRCH, was born in 1975 and has been coordinating powertrain development at the TRATON GROUP since 2018. The mechanical engineer earned his doctorate with an FVV project at TU Braunschweig and today heads FVV's »Combustion CI« planning group on a voluntary basis.





→ Christian Weiskirch's sons learn what a

twin carburettor is at the garage at home: the three are working together to restore a Karmann T34.

It is this continuity, or maybe just consistency, that is a common thread though every area of Weiskirch's life. He met his wife, an architect, in 1994, in the summer after his university entrance exams. The couple and their two sons live in a house designed by his wife in Altdorf near Nuremberg. However, continuity can also open up new possibilities, as evidenced by the innovative heating system at their home: the HVAC system is not powered with fossil fuels, but by means of a heat pump, heat exchangers and an ice bank. //