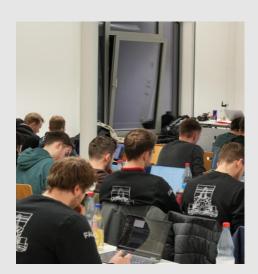


## Newsletter

High-Voltage Motorsports e.V.



Bild: TF FAU | FATHERS&SUN



# Dear sponsors, dear friends of the association,

With the start of spring, we have moved from the design phase to the production phase. We are now in the middle of the exciting processes that turn ideas and concepts into real products. Between exams and production, however, we always find a free minute or two to spend time together. Of course, we don't miss out on watching Formula 1 either.

Over the last few months, there have also been a lot of organizational changes regarding our renaming. As team leaders, we have agreed on a new logo, which you can now also see on this newsletter, and we have shared our renaming on our social media channels. We are also revising our website step by step so that it will hopefully have a new design in time for the rollout.

We are now looking forward to giving you an insight into our current development and keeping you up to date with our progress.

### **JANUARY 2024**

### **RULESQUIZ**

At the beginning of the year, the rules quizzes took place again on 26<sup>th</sup> January.

With the aim of qualifying for the various events in the summer, the entire team came together to work on and solve the quiz questions together. We can look back on this day with great satisfaction, as we were able to successfully qualify for several events and were therefore able to choose freely from various countries.

# A look into our nontechnical subteams

Cost Report - After a great start to the season, we are in full swing and well on schedule.

The parts lists are ready, the activity-based costing techniques have been revised and further topics to deepen our understanding of costs are in progress.





# Mechanical development

Chassis - All the designs and calculations for the construction of our new monocoque have been completed. The outer skin is currently being diligently laminated every day. According to the current plan, our monocoque will be ready by early to mid-April so that all the other components can then be installed in the vehicle.

Powertrain - Our inverter concept has been revised and the base, the cooling plate and the remaining housing components have been manufactured. The fully sealing and electrically shielding aluminum housing is also very easy to install. The cooling jackets of the motors are manufactured and, like the cooling plate, are made of 3D-printed aluminum. The simulations of the cooling system and the simulations for the structure of our new high-voltage battery delivered very promising results. Our electronic components and the high-voltage connectors for the battery have been tested and manufactured so that the battery management system and the battery cells can now be assembled.

Suspension - Many parts have come back to us from production, while others are still being manufactured. Among other things, we have already received 3D printed parts such as wheel carriers and steering connections.

Aerodynamics - Production has also started here. In the last 2 months, a large part of the wing elements of our upcoming racing car have already been manufactured. We are currently in the process of producing the underbodies. The underside of the underbodies has already been laminated onto the negative molds and the interior is currently being formed. At the same time, the last new negative molds for this season are being produced and prepared for the production of our components.

# Between circuit boards and software

Electronics - The circuit boards have been manufactured in the electronics department over the past few months. In this process, we use a pick & place machine for the majority of the components. The rest is then assembled manually using vacuum tweezers. These boards are currently being loaded with our software and tested. We held a software workshop for this so that new members can also actively help. At the same time, the concept for our wiring harness was worked out and we will soon be able to produce this too.

# **Final words**

With the rollout date within reach, the pressure is naturally on to complete the car on time. We cordially invite you to join us in welcoming our FAUmax rho to our FAUmax family on 30<sup>th</sup> April 2024.

Until then!

