



Press Release

FORMULA SAE ITALY, FORMULA ELECTRIC ITALY & FORMULA DRIVERLESS: YESTERDAY CONCLUDED THE STATIC EVENTS, WITH THE ANNOUNCEMENT THIS MORNING OF THE RANKINGS AND FINALISTS FOR THE BUSINESS PRESENTATION EVENT, THE DESIGN EVENT AND THE COST EVENT

Varano de' Melegari, 27th July 2019 - The static events of Formula SAE Italy concluded yesterday, the rankings were published this morning for all the teams taking part in all classes and were assessed for their Business presentation event, Design event and Cost event.

As the event has not yet completely finished, the rankings have been announced without revealing the podium positions of the winning finalists and are listed in their respective rankings according to ascending car numbers. The winners of the static tests will be announced tomorrow evening during the closing ceremony at 8.30 pm.

This year, the Business Presentation and the Cost events both followed the model used by the Formula Student Germany (FSG) which, last year, was only applied to the Driverless class.

In the **Business Presentation** event, the competing students were all asked to simulate a presentation for their proposed car in front of an audience of potential investors. The teams then presented a business plan and tried to convince the audience to invest in their project. The resulting car had to be potentially marketable and be able to be used as a car. In this context, the Business Presentation they intend to deliver must analyse both the client and the marketplace, marketing and communication channels, classic economic and financial analyses (return on investment, break-even point etc.) and a specific investment request to the judging panel.

The judge's assessment of the Business Presentation has been brought into line with the FSG Regulations to give the teams the opportunity to participate in multiple events at European level using the same regulatory framework. The judges were divided into 5 panels and their assessments were based on nine elements that are set out in the FSG Regulations. In contrast to previous years, there are now key elements such as business and technological innovations as well as financial soundness involved in the challenge. The third step was the introduction of in-depth study (one for each formula class), on a topic decided by the head judge and which was communicated to the teams one month in advance. The aim of this section is to encourage the development of creative and innovative solutions on key issues that affect evolution within the car sector. Obviously, delivery, i.e. presentation performance as well as visual aids used, remain significant elements in their overall assessment, together with the ability to answer questions correctly and knowledgeably.

The maximum points awarded in this test is 75 out of a possible 1,000 points available in the competition as a whole.

National Association of Automotive Industry (ANFIA)



Among the new features of this year's competition is the introduction of virtual reality as an element used by some teams. In general, digitisation and connectivity are, in fact, increasingly becoming a strategic element in the automotive world.

The overall levels seen in this 2019 Business Presentation event was consistent with the levels of those in previous years. Year after year, the teams have shown an increasing understanding of the importance of the Business Presentation event and took advantage of the suggestions that were made in previous years. They have also integrated increasingly specialised skills, including those used in business schools. The top-ranked participants, in particular, submitted outstanding presentations that were well balanced and each was placed only a few points apart. In class 1C (internal combustion cars), it was decided to select four finalists instead of the usual three, due to the closeness in the scoring.

A unique situation also occurred in this class where two teams from this same category went to the finals and presented the same, extremely innovative idea: combining racing with augmented reality and video gaming. Italian teams performed well, two of which went through to the finals: **E-Team Racing Squad** from the University of Pisa and **Dynamis PRC** from the Polytechnic of Milan. The other two finalists in class 1C were the **PWR Racing Team** from the University of Warsaw, for the second consecutive year, and **Einstein Motorsport** from the Hochschule in Ulm.

The number of teams competing in this year's Driverless Class has increased, with 8 teams participating in this second year of the event, an improvement over the previous initial number. These teams have also shown that they have the skills and knowledge to grow further in the coming years. The finalists in this event were:- **Sapienza Corse** from the University of Rome La Sapienza, **MITeamDelft** from the Delft University of Technology and **Ecurie Aix Formula Student Team RWTH Aachen** from the RWTH Aachen University.

In Class 1E (electric cars), the **Aristotle University Racing Team Electric - Aristurtle** of the Aristotle University of Thessaloniki made it to the finals for the second year running. The other two finalists were: **HofSpannung Motorsport** from the University of Applied Sciences Hof and **Blue Flash Mobility Concepts** from HAWK Gottingen.

In Class 3 (the presentation of car designs only), there were two Italian teams in the finals: **Unical Reparto Corse** from the University of Calabria and **STV-Scuderia Tor Vergata** from the University of Rome Tor Vergata, together with **Strohm und Sohne** from the Technische Hochschule Nurnberg Georg Simon Ohm.

Moving on to the **Design** event, this of the most important and challenging aspect for the students as the engineering work that goes behind the design of their car is fundamental. With a maximum score of 150 points (out of a total of 1,000), they are judged by a panel of experts from the automotive world - divided into ten committees that are made up of top designers from the industry.

National Association of Automotive Industry (ANFIA)



The judges' assessment are based on the classic categories: suspension, chassis, engine etc, however a number of points are awarded on its aesthetics and the degree of creativity and innovation of its design.

A lot of careful thought is given to the finalists: after direct dialogue between the judges and the students in the pit, 3 teams from Class 1C and 3 teams from Class 1E are selected to take part in the finals. It is at that time when the best cars are presented physically to all the judges and then they have the opportunity to view and compare them directly with other teams.

In this edition of the Design event, the level of the teams' preparation was quite varied and fairly polarised towards the extremes, there was a relatively low number of medium-high level teams present.

Among the finalists of Class 1C of the Design event there were **Dynamis PRC** of the Politecnico di Milano, which had again proved to be a consistent team that has grown steadily over the years and has now reached very high levels, being able to compete against the best European teams. **High-Octane Motorsports** from the Friedrich-Alexander University Erlangen Nuremberg presented a car with a high level of aerodynamic thought and weight optimisation that was the lightest of the top cars in the category (151 kg). Finally, **CTU CarTech** from the Czech Technical University of Prague proved to have very good teamwork and organisational skills.

Among the finalists of the Class 1E, the **FS Team Tallin** of the Tallin University of Technology proved to be impressive because, despite coming from a country that has no automotive tradition, through their organisational skills they were able to reach the top of the competition having only entered last year.

The **Squadra Corse PoliTo** from the Polytechnic of Turin has shown significant growth over recent years and in the future could reach the top of the European rankings.

Finally, the **E.Stall** team of UAS Esslingen presented a very well designed car, with original solutions for the use of traction motors inside the wheels of the car.

In Class 3, Italian teams yet again showed a good level of achievement, suggesting the possibility of good results when they can implement what they have done on paper so far. The finalists in this class were **STV-Scuderia Tor Vergata** of the University of Rome Tor Vergata, **SRT Electric** of the Belgorod State Technological University after V. G. Shukhov and **Unitus Racing Team** of the University of Tuscia.

In Class 1D, the Design Event score is 275 points compared to the other categories where 150 points are awarded due to the development of its autonomous system and not only to the design of the vehicle. The overall level of the teams in this class was found to be high, considering the complexity of the projects, with a high level of integration of mechanics, electronics and information technology. Some teams distinguished themselves from the others by their better organisational and development structures. Those that considered the complexities of the vehicle system, without focusing solely on the software, were rewarded. The judges insisted that individuals who have developed the autonomous driving system must also have a good knowledge of the overall vehicle system. There has been a significant growth in the level of the teams that

National Association of Automotive Industry (ANFIA)



participated in this class last year, along with the new teams that decided to compete in this challenge.

Moving on to the finalists, **MITeamDelft** of the Delft University of Technology stood out for its innovative and well-structured approach to car development and for its interesting partnership with the Massachusetts Institute of Technology (MIT), which created a way to develop both the software and the vehicle with effective communication and also the use of a small test vehicle in the USA. The **munichMotorsport** team at the Hochschule fur Angewandte Wissenschaften Munchen, developed their system which was presented last year, mainly by improving their sensor system, an increase in the number of cameras used and a very effective control system. The **RWTH Aachen** team of Ecurie Aix Formula Student Team RWTH Aachen, finally stood out as a young, well prepared team, with a sound knowledge of their vehicle with its well-designed braking and steering systems.

Since this is a relatively new addition to the event, some interesting ideas in terms of approach and comparisons came from the teams themselves, from the perspective of a constructive and collaborative approach.

Finally, the **Cost event** (worth 100 points out of a total of 1,000) focused on evaluating cost reports - produced by the teams rather than on standard cost tables and based on their own costing processes. The focus is no longer on the cost of the car as such, but on the team's ability to master the 'scale of costs' from the very beginning of conception. This test, therefore, becomes a kind of financial thesis on the car, without ignoring certain important technical and production aspects. The teams create their own standard tables and then explain to the judges how they created them, explaining the methodologies and highlighting the verifiable and reliable sources from which they obtained the basic data. Among the other categories evaluated, cost understanding is the main new feature and it is one of the most important. This last category is evaluated both through the examination of documents prepared by the teams before the event (cost explanation file), and through a Q&A process during the audits. Another important innovation, in addition to the subjects that are strictly related to the cost of the car, are areas of issues encountered today such as environmental impacts of the car from its production to its disposal, making or buy decisions, the comparison between prototype production and mass production and certain significant factors such as resource planning and risk management.

The Cost event judging panel is made up of around thirty members, divided into five committees, who each visits the team directly in their pits. Also new this year is the decision to give feedback to the teams directly after the inspection to get the most out of the teams.

This only applied to the driverless section last year. However, it should be noted that, since then this has evolved and changes have been made to its implementation.

In general, all the teams that during the months prior to the event have studied the new approach, achieved commendable performances, approaching, or sometimes surpassing, teams that had already experimented with this approach in other European events last year. Those who have not

National Association of Automotive Industry (ANFIA)



been able to keep up to date with the latest developments have inevitably suffered from a knowledge gap. Excellent work was done, in particular by the teams that attended the training sessions that took place at the end of March at MEC SPE in Parma. These training sessions were held by representatives of the judges for the Cost Event of Formula SAE Italy.

The top teams won by a significant margin (approximately 2 points difference), demonstrating a very high standard of quality of work. We would also like to point out the excellent ranking of the teams that over the last few years have shown consistent growth.

The first three classified in Class 1C included: **UH Racing** from the University of Hertfordshire, **E-Team Racing Team** from the University of Pisa and the **Race UP Combustion** team from the University of Padua. In the E-Class there were the **Aristotle University Racing Team Electric - Aristurtle** of the Aristotle University of Thessaloniki, the **E-Motion Rennteam Aalen** of the Hochschule Aalen, the **PolITO Racing Team** of the Politecnico di Torino and the **Blue Flash Mobility Concepts** of HAWK Göttingen in the final. Among the finalists of Class 3 were, **Unical Racing Department** of the University of Calabria, **AUMotorsports** of Alexandria University and **Strohm und Söhne** of the Technische Hochschule Nürnberg Georg Simon Ohm. Finally, in Class 1D, were **Sapienza Corse** of the University of Rome La Sapienza, **University Racing Eindhoven** of Eindhoven University of Technology, **High-Octane Motorsports** of Friedrich-Alexander University Erlangen Nuremberg and **Ecurie Aix Formula Student Team RWTH Aachen** of RWTH Aachen.

A final thing to point out is that Formula SAE Italy is more than a competition, it defines itself as a formative-educational event. This is why the feedback sessions held today from 9.30 a.m. to 12.45 p.m. involving the judges who judged the various teams is so important, as it provides an opportunity for improvement that, year on year, the teams have shown they know how to implement and introduce these proposals into next year's competition.

Further information can be found on the event website (<https://www.formula-ata.it/>), where you can find the complete schedule, list of participants and all the details about the event.

At the following link the daily official videos of FSAE Italy 2019:

https://www.youtube.com/channel/UCs4_AZpgOWjuODLTNjE3ZHq

National Association of Automotive Industry (ANFIA)



Social media channels for Formula SAE Italy:



@FormulaSAEItaly
twitter.com/FormulasAEItaly



Formula SAE Italy
facebook.com/FormulasAEItaly



Formula SAE Italy
@formulasaeitaly



FSAEItaly

For more information: ANFIA Press Office

Miriam Gangi (Ms.) - m.gangi@anfia.it

Telephone: +39 011 5546502

Mobile: +39 338 7303167

ANFIA - Italian Association of the Automotive Industry - is one of the leading Italian Trade Associations, members of CONFINDUSTRIA.

Born in March 1912, over these one hundred years, ANFIA mission has always been to represent the interests of its associate members and ensure effective communication between the Italian motor vehicle industries on the one hand, and the Public Administration and Italian political bodies on the other, with regard to all technical, economic, fiscal, legal, statistical and quality-related issues referred to the automotive sector.

The Association is structured in three product-based Groups, each one chaired by a President.

Components: motor vehicle parts and components manufacturers; Car Coachbuilders and Designers: companies working in the sector of design, engineering and style of motor vehicles and/or parts and components for the automotive sector; Motor vehicles: motor vehicles manufacturers in general, including trucks, trailers, camper vans, special means of transport.

National Association of Automotive Industry (ANFIA)

Locations: 10128 Turin - Corso Galileo Ferraris, 61 - Phone +39 011 5546511 - Fax +39 011 545464 - E-mail: anfia@anfia.it -
00144 Rome - Viale Pasteur, 10 - Phone +39 06 54221493 (4) - Fax +39 06 54221418- E-mail: anfia.roma@anfia.it
www.anfia.it