



Press release

**FORMULA SAE ITALY 2023: WHZ RACING TEAM FROM UAS ZWICKAU WINS THE ELECTRIC CAR CLASS, RACE UP COMBUSTION FROM THE UNIVERSITÀ DEGLI STUDI DI PADOVA WINS THE THERMAL COMBUSTION CAR CLASS, UNINA CORSE - FEDERICO II RACING TEAM FROM NAPLES WINS THE DRIVERLESS CAR CLASS AND FINALLY UNIVERSITÀ DI ROMA LA SAPIENZA TRIUMPHS IN CLASS 3**

The Universities of Bologna and Roma Tor Vergata came second and third, respectively, in the internal combustion Class, while the Politecnico of Milan came third in the electric Class, and the team from the University of Modena and Reggio Emilia came third in the Driverless Class. The Italian teams that came first in the various static events were Race UP Combustion and Race Up Electric from the University of Padua, UniNa Corse - Racing Team from the University of Naples Federico II and Dynamis PRC from the Politecnico of Milan

*Varano de' Melegari, 17th July 2023* - With the closing ceremony at 8.30 p.m., the 18th edition of Formula SAE Italy - an international educational event organised by ANFIA in partnership with SAE International, the "R. Paletti" Racetrack of Varano de' Melegari and the Motor Valley Association, and with the primary sponsorship of Industrie Saleri Italo - closed yesterday. The event was attended by around 1,600 students from 20 countries (Indonesia is the furthest). A total of 56 teams competed, 47 of them European, with 22 Italians from 17 different universities and nine from outside Europe.

The podium in **Class 1C (internal combustion)** is all Italian. In first place was **Race UP Combustion** from the University of Padua, which scored well in all the tests, winning the Cost and Design Events and the Endurance and Autocross of Class 1C, thanks to a balanced and reliable car. Second place went to **UniBo Motorsport**, from the University of Bologna, which presented a good car, finishing second in the Endurance and third in the Autocross, and third place went to the **Scuderia Tor Vergata team**, from the University of Rome Tor Vergata, with an excellent design.

In **Class 1E (electric cars)**, the **WHZ Racing Team** from Zwickau University of Applied Sciences triumphed - with excellent performances in the dynamic tests, especially in the Endurance and Autocross, where it won thanks to a car that showed sophisticated solutions, including the carbon body, fast and clean on the track - and a third place in the Design Event. Second place goes to **FS Team Tallinn TU UAS**, runner-up in the Endurance 1E and Autocross and first in the Design Event, who presented a car of a high standard but a little slower in the practical implementation of the design. Third place went to the **Dynamis PRC team** from the Politecnico di Milano, who placed well in the Autocross and won the Business Presentation event but were penalised for not finishing the Endurance event.

In **Class 3 (presentation of the car project only, without a prototype)**, the **Sapienza Corse team** from the Sapienza University of Rome took first place with a complex project for a future hybrid system to be realised, in which innovation and creativity paid off. Second place went to the **AAM**

**Italian Association of the Automotive Industry**



**Driverless Racing Team** from the Arab Academy for Science, Technology and Maritime Transport, and third to the **Polimarche Racing Team** from the Università Politecnica delle Marche.

In **Class 1D (driverless)**, the teams that managed to pass the technical checks generally showed a good level, each with its specific characteristics. The teams from the University of Naples and those from the University of Modena and Reggio Emilia, who had participated in previous editions, showed significant improvement. The first prize went to **UniNa Corse - Squadra Corse** of the University of Naples Federico II, who was very strong in acceleration (1st place), thanks to good trajectory management on the straight and a good engine, which allowed the car to perform well in all the dynamic tests; the team was also rewarded in the static events (1st place in Class 1D in the cost event and the business presentation event). Second place went to **Global Formula Racing** from Oregon State University, who, with the sensors at their disposal (they chose to install only one camera), managed to get to the bottom of the Autocross (but did not complete the Trackdrive) and were also runners-up in the Cost Event and the Design Event. Third place went to **MoRe Modena Racing Driverless** from the University of Modena and Reggio Emilia, whose car came closest to completing the Trackdrive event.

**Gianmarco Giorda, Director General of ANFIA**, expressed his satisfaction with the 18th edition of Formula SAE Italy: *“The student teams displayed exceptional commitment and seriousness in handling the challenges of design, technical management, business plan presentation, economic sustainability, teamwork, team management, compliance with the car, and performance on the track. This gave them an excellent opportunity to develop in front of the automotive and motorsport experts serving as judges and technical scrutineers. ANFIA extends its gratitude to the judges and scrutineers for their valuable support.*

*Representatives from the automotive production chain, including some of the sponsoring companies and technical partners, serve on the juries for this student competition. This enables young aspiring engineers to understand the daily professional challenges those in the industry face. The experience allows them to become closer to the industrial reality, which is beyond the scope of the competition.*

*It is worth noting that this event has an international character, bringing together young people from all over the world, with the farthest countries represented being Indonesia and Iran. They collaborate, share ideas, and work together for five days, immersing themselves in different cultures and visions. This training experience fosters healthy competition between teams and emphasises the value of learning and improving.*

*The event had 34 sponsors and partners, including automotive and motorsport companies, associations, consultancies, and recruitment companies. These companies appreciated the opportunity to recruit from a pool of 1,600 highly prepared and ambitious girls and boys. They also valued networking opportunities between companies.*

## Italian Association of the Automotive Industry



*Based on the success of this event, the organisers are planning the 2024 edition, intending to offer students an even better preparatory pathway to entering the world of work. They aim to enhance the best talents and do even more for the students”.*

Yesterday, one of the competition's main events was the **Endurance Test**. It's a test that evaluates the cars' overall performance in the race, and it's worth 275 out of a total of 1,000 points. The test happens on a 22 km track, and team members are not allowed to work on the car during the test. There's also a driver change in the middle of the test. The order in which the teams take to the track is determined by the results of the autocross test, with the fastest teams finishing last. The total endurance time is calculated by adding each driver's time and any penalties, and the quickest team on the track serves as the benchmark for comparison.

During the Endurance Test, 38 cars participated, including 16 electric vehicles and 22 internal combustion cars. The track layout, which was similar to an autocross, plus the high temperatures, helped to highlight the differences in performance among the vehicles. This provided a challenging environment, especially for electric cars. The drivers' skills were tested, particularly on a fast-hooked corner. Unfortunately, the University of Modena and Reggio Emilia and other promising teams could not complete the test due to an oil leak. At the same time, the car of Politecnico di Milano had to retire due to a battery overheating issue.

In this dynamic test, the Race UP Combustion team from the University of Padua secured the first position in **Class 1C** due to their excellent pace and flawless driving. The second and third positions were secured by UniBo Motorsport from the University of Bologna and Scuderia Tor Vergata from the University of Rome, respectively.

Similarly, in **Class 1E**, the Endurance WHZ Racing Team from the University of Zwickau emerged as the winner by surpassing the runner-up team with the lowest number of errors. FS Team Tallinn from the University of Tallinn and eRacing Tecnum from the University of Navarra secured the second and third positions, respectively.

In **Class 1D**, which was **Trackdrive** instead of **Endurance**, first place went to MoRe Modena Racing Driverless from the University of Modena and Reggio Emilia, followed by UniNa Corse - Squadra Corse from the University of Naples Federico II and third place went to Prom Racing from the National Technical University of Athens.

At the awards ceremony, the winners of the **static events - Cost Event, Business Presentation Event, and Design Event** - were officially recognised and awarded their prizes, solidifying their places on the winners' podium.

The winners of the **Class 1D Cost Event** were UniNa Corse - Squadra Corse from the University of Naples Federico II in first place, followed by Global Formula Racing from Oregon State University in second place, and Firenze Race Team from the University of Florence in third place. In **Class 1E**, the top spot was taken by Race UP Electric from the University of Padua, with E-Agle Trento

### Italian Association of the Automotive Industry



Racing Team from the University of Trento and TU Darmstadt Racing Team e.V. from the Technical University of Darmstadt following in second and third place, respectively. Lastly, in Class 1C, the winners were the Race UP Combustion Team from the University of Padua, with CULS Prague Formula Racing from the Czech University of Life Sciences in Prague and UniBo Motorsport from the University of Bologna taking second and third place, respectively.

During the **Business Presentation Event** for Class 1D, UniNa Corse - Squadra Corse from the University of Naples Federico II took first place, followed by Squadra Corse Driverless PoliTO from Politecnico di Torino in second place, and MoRe Modena Racing Driverless from the University of Modena and Reggio Emilia in third place. In Class 1E, Dynamis PRC from Politecnico di Milano secured first place. In contrast, the ISC FS Racing Team from ICAI | Comillas Pontifical University and E-Team Squadra Corse from the University of Pisa came in second and third place, respectively. Lastly, in Class 1C, the University of Gadjah Mada's Bimasakti Racing Team placed first, while Race UP Combustion from the University of Padua and UniBo Motorsport from the University of Bologna came in second and third place, respectively.

The winners of the Class 1D **Design Event** were eForce FEE Prague Formula from the Czech Technical University in Prague, followed by Global Formula Racing from Oregon State University and MoRe Modena Racing Driverless from the University of Modena and Reggio Emilia. FS Team Tallinn from Tallinn UT/UAS secured first place in Class 1E, with Dynamis PRC from Milan Polytechnic and WHZ Racing Team from Zwickau UAS following closely. Finally, in Class 1C, the University of Padua's Race UP Combustion came in first, followed by MoRe Modena Racing Combustion from the University of Modena and Reggio Emilia and CULS Prague Formula Racing from the Czech University of Life Sciences in Prague.

It's important to acknowledge the sponsors who presented special prizes and awards at the event. Race UP Combustion from the University of Padua received the **Dallara Award** for achieving the best car/resource balance. Meanwhile, the WHZ Racing Team from Zwickau University of Applied Sciences claimed the **ITT Award** for first place in the electric car class (1E). Additionally, the same team won the **Podium Advanced Technologies Best Battery Award 2023** for designing an exceptional battery that facilitated the car's excellent performance in dynamic tests. The team also prioritised safety and technical innovation in their battery design. Finally, the **Teoresi Group** awarded the UniUD E-Racing Team from the University of Udine with the **TeoRace Special Award** for their outstanding electronics development process. The team's project impressed judges with its innovative controls, methods, and architectures, including a remote software update system, real-time telemetry, and customised hardware design.

Finally, Graziano Natalini, Chairman and Team Leader of the Salento Racing C Team at the University of Salento, was awarded the ANFIA Special Award for "Type-approve your FSAE Italy car".

### Italian Association of the Automotive Industry



All further information can be found on the initiative's website ([www.formula-ata.it/](http://www.formula-ata.it/)), including the official rankings: [www.formula-ata.it/results-2023/](http://www.formula-ata.it/results-2023/)

The official daily videos of FSAE Italy 2023 are at: <https://bit.ly/44tlk5Z>

#### *For information:*

ANFIA Press Office

Miriam Gangi - [m.gangi@anfia.it](mailto:m.gangi@anfia.it)

Tel: 011 5546502

Mobile: 338 7303167

#### **ANFIA - Italian Association of the Automotive Industry**

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 Design & Engineering:* 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.

[www.anfia.it](http://www.anfia.it)

[twitter.com/ANFIA\\_it](https://twitter.com/ANFIA_it)

[www.linkedin.com/company/anfia-it](https://www.linkedin.com/company/anfia-it)

#### **The Automotive Production Chain in Italy**

5,528 companies

273,600 employees (direct and indirect), the 7,3% of the employees in the Italian manufacturing sector

86.2 billion Euros of turnover, which means 9,9% of the Italian manufacturing sector turnover and of 5.2% of the Italian GDP

76.3 billion Euros of tax levy of motorization

#### **Formula SAE Italy**

Formula SAE was established in 1981 on the initiative of the Society of Automotive Engineers (SAE) and requires the participating students to design and build a prototype single-seater racing car destined for eventual sale. They must follow specific technical and financial constraints as if a company in the automotive sector commissioned it for a non-professional user. During the event, the teams of students take part in static tests - Design, Business Presentations and Cost Events - and dynamic tests on the track (Acceleration, Skid Pad, Autocross, Endurance; for Class 1D, the Endurance has been replaced by the Trackdrive).

The event aims to focus not on the competition itself, but the skills acquired by the young people in terms of engineering knowledge, commitment, organisation and adherence to deadlines, design coordination and product presentation. Thus, the competition is an educational event in which young people can learn teamwork dynamics, with strict rules and deadlines that must be respected and be put to the test in the actual construction and design phases of a prototype and with all the difficulties that this entails.

Formula SAE arrived in Italy in 2005, organized by ATA (Associazione Tecnica dell'Autoveicolo). After 12 editions, since 2017, with the acquisition of ATA by ANFIA, the organization of the event passed to ANFIA, which organized 4 editions at "R. Paletti" Racing Track of Varano de' Melegari (Parma).

<https://www.formula-ata.it/>

### **Italian Association of the Automotive Industry**

Locations: 10128 Turin - Corso Galileo Ferraris, 61 - Telephone +39 011 5546511 - E-mail: [anfia@anfia.it](mailto:anfia@anfia.it) -

00144 Rome - Viale Pasteur, 10 - Telephone +39 06 54221493 (4) - E-mail: [anfia.roma@anfia.it](mailto:anfia.roma@anfia.it)

[www.anfia.it](http://www.anfia.it)



**Social channels of Formula SAE Italy:**



@FormulaSAEItaly  
[twitter.com/FormulasAEItaly](https://twitter.com/FormulasAEItaly)



Formula SAE Italy  
[@formulasaeitaly](https://www.instagram.com/formulasaeitaly)



Formula SAE Italy  
[facebook.com/FormulasAEItaly](https://www.facebook.com/FormulasAEItaly)



FSAEItaly

**Italian Association of the Automotive Industry**

Locations: 10128 Turin - Corso Galileo Ferraris, 61 - Telephone +39 011 5546511 - E-mail: [anfia@anfia.it](mailto:anfia@anfia.it) -  
00144 Rome - Viale Pasteur, 10 - Telephone +39 06 54221493 (4) - E-mail: [anfia.roma@anfia.it](mailto:anfia.roma@anfia.it)  
[www.anfia.it](http://www.anfia.it)