

# Rocket Challenge

## Reaching new heights with the first water rocket competition

It was a freezing minus 8 degree Celsius on December 16, 2022, when 3 members of the team arrived at Gesamtschule Norf[1] to kick off the very first water rocket competition. The aim of this local university-school collaboration: find out how high self-build water rockets can fly and spark interest for pursuing an academic path after graduation. As part of the working plan on Equity, Inclusion and Diversity, such collaborations assure more inclusiveness and more connection with society. By selecting a high school partner certified as “European School in North Rhine-Westphalia”[2], a common denominator was found in the aim of strengthening younger generations’ European identity.



The competition kicked off with a warm welcome of the HHU team by physics teacher Jakob Thomas. Thereafter, instructions on the building process<sup>[3]</sup> were given and available materials presented. 15 students then teamed up in small groups. To give insights into space-related research, Dagmara Stasiowska (AGH UST Kraków) presented a short talk on “The BeeGs project – the story of how I am trying to convince NASA that they need me on Mars”. Afterwards, the teams could build their rockets for half an hour. The change of location to the schoolyard and installation of the starting ramp initiated the dynamic part of the competition. Now, it was design and altitude that were the deciding factors to identify the winning team.

Each of the 6 teams launched their own rocket and unfortunately not all took off to reach altitudes, some had their strengths more in the creative part. However, it was a very close call between two teams, one of which reached around 15 meters of height. But, the winning team’s rocket went beyond that and reached around 18 meters, therefore, it was Elias and Ilyas rocket that won the competition after all. As a reward, they received an UNIVERSEH goodie bag and all participating students received a voucher for a virtual reality gaming center to keep on discovering new – in this case virtual – spaces.

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[1] Link: Startseite - Gesamtschule Norf (<https://ge-norf.de>)

[2] Link: Start - Europaschulen in NRW (<https://www.europaschulen.nrw.de>)

[3] [Link: Bauanleitung\\_Wasserrakete\\_und\\_Rampe.pdf](https://www.dlr.de/as/Portaldata/5/Resources/dokumente/abteilungen/abt_wk/Bauanleitung_Wasserrakete_und_Rampe.pdf)  
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