



We are six 10th graders from bilingual class of Hainberg-Gymnasium in Göttingen. When the DLR school lab asked for some students to take part in a course about Aeroelasticity, we were happy to consent. Our task was not only to write an article about it, but also to accompany them and intensify social interaction.

From the left side: Alexander Sheldrick, Paula Rassmann, Jonas Baum, Max Sandholzer, Larissa Wessel

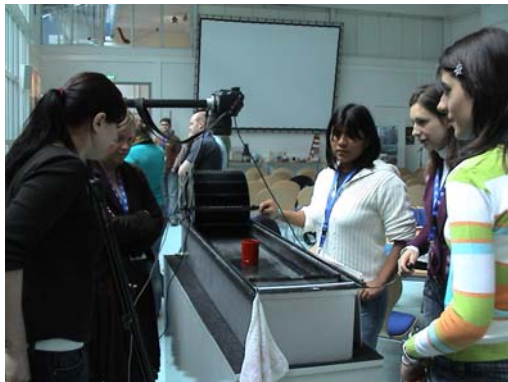
Six students from the Hainberg Gymnasium Göttingen visited the EWA DLR School Lab Course in May 2006

We couldn't imagine four days of physics to be interesting but contrary to our expectations it turned out to be very exciting. For four days 21 students from Germany, Great Britain, Belgium, India, and Italy came together at the DLR in Göttingen to experiment and listen to presentations about Aeroelasticity and Aerodynamics.

The DLR School Lab was founded in 2000 and is a project to increase the interest of young people in natural sciences & engineering. Their motto is "Out of school – into the lab".



The DLR in Göttingen



On the first day of the four day workshop we were welcomed by the site director Braunschweig /Göttingen, Dipl.-Ing. Josef Thomas and the organiser of the workshop, Dipl.-Ing. Tanja Kirmse. Afterwards the students formed small groups to conduct various experiments, for example Prandtl's Water tunnel. The Water tunnel (invented by Ludwig Prandtl (1875-1953+)) visualises the flow of water in a tunnel with the help of reflecting particles. Through the observations the students made and the explanations Silvia Reuß gave them, the students could easily understand the connection between the shape of an object and its impact on the flow

bypassing it. Other experiments like the soap-film tunnel provided further information about the resulting pressure behind and in front of an object.

After the lunch at the DLR canteen the participants from outside Göttingen received an invitation on a city tour through Göttingen which they found most interesting and were greeted by the mayor of Göttingen, Wilhelm Gerhardy, at the new city hall.

The next day started with a lecture about the high pressure wind tunnel by Dipl.-Ing. Martin Rippl. Afterwards the groups continued the experiments from the day before. After a very tasty lunch at the DLR canteen there were some presentations concerning Aeroelasticity and measurement at the DLR site Göttingen. The last point of this day's program was a construction of a wind gage under the supervision of Harald Görlich and Christian Denker.

On the following day the participants were divided into two groups. The first group listened to a presentation of the ultra high velocity video camera by Dr.Boleslaw Stasicki which was one of the favourite presentations for many students. The other group calibrated the wind gage they had

constructed the day before. After lunch there was another talk about: “How to fly” which was a preparation for the visit of the airfield of Bad Gandersheim the next day, followed by a final discussion and feedback. In the evening there was a barbecue and afterwards we went into the city with some of the students and had a great final evening.

The last day was located completely in the indication of practical experiences. The whole group went to Bad Gandersheim to fly in a glider. After a short introduction the first glider took off. The flight was an impressive experience and a fantastic conclusion of a week under the topic: How does an airplane fly?

Later that afternoon the whole group went back to the DLR Göttingen. Everybody was happy, but also a bit exhausted.

We had prepared a short questionnaire for the students to get some feedback. All the students agreed that the whole workshop was interesting and that they were able to understand all the experiments.

Everybody loved the atmosphere; everyone was very open and friendly and was glad to get to know other cultures. The whole team was very friendly, patient and helpful and there was always something to drink and eat, so everyone felt fine, accepted and well cared for. The only thing the students criticised was that some lectures were too long. We also talked to some teachers who had wanted their students to gain a profound understanding of aerodynamics and to meet people from other countries. All of them told us that their expectations had been completely fulfilled. The organiser Tania Kirmse was also very pleased and Harald Görlich, a teacher at the FKG, who has been working in the School Lab since 2002, told us that he noticed that the students who came to visit the School Lab are always more interested than they are in school and that the School Lab could change the attitude to physics of many people.

