suggested problems. Dr. David Dennetiere, head of the optics group of the experimental division at the SOLEIL Synchrotron (France), gave a remote introductive lecture on interferometry in Optics and its applications. This allowed the students to understand the knowledge basics to properly tackle the first experiment of the event: Doppler measurements with light. Four groups of students were created, each handling an essential aspect of a scientific experiment which researchers face daily in their careers: theoretical predictions, mechanical set-up, software and data analysis. The students realised immediately that not only were they working on each individual aspect of the process, but the groups had to work interactively with each other in order for the complete mechanism and dynamic of the experiment to happen. They applied the same strategy after Dr. Olivier Acher’s (Innovation Director at HORIBA) video-introduction to the new NanoGPS OXYO software, in order to operate their first hands-on nanometrology experiment: comparing OXYO to the old-fashioned Wheatstone bridge method. The groups successfully built the two experimental setups while designing the relevant interfaces by communicating and enthusiastically working as one. Some very motivated and passionate students kept on working on the data analysis and the due final presentation at IdeaSquare until late at night.

The last day of the event started with a hands-on introduction to Labview and FPGAs presented by Odd Oyvind Andreassen, section Leader of the Measurements, Tests and Analysis at CERN, alongside Adriaan Rijllart, retired colleague of the same group. During this workshop, the students had the opportunity to experiment and play around with Labview by programming different tasks on a virtual machine. The results of the two experiments of the day before were then presented to the whole group and the organisers by the data-analysis team, helped by a person from each other group to sum up what had been done. These results were accompanied by a general discussion around what would be to improve and what was well done, which completed the knowledge and skills acquired from the past few days. After a summary and conclusive words by the main organisers Dr. Stefan Kubsky and Dr. Markus Nordberg, the participants left CERN light-hearted, holding onto these few days of discovery and experience as the days where they learned many new skills and projected themselves in their future careers as scientists.

Special thanks go to the EPS, to the TIG and its chair Christophe Rossel, to the CERN IdeaSquare for making this event possible and to Stefan Kubsky and Markus Nordberg for organising it.

The final presentation is accessible under following link: https://indico.cern.ch/event/1253966/contributions/5267617/