



### **EUCAS 2017 Impressions**

October 20, 2017 (HE113, STH612). The 13<sup>th</sup> European Conference on Applied Superconductivity ([EUCAS 2017](#)) took place this year in Switzerland, in the great and very international town of Geneva known for its great international organizations, like the United Nations and CERN. The timing was perfect for an early autumn atmosphere at Lac Léman, in the beginning with a little bit of rain but then wonderful early autumn weather. The Conference was organized by CERN in cooperation with the University of Geneva; the chair of the conference was shared by Luca Bottura and Lucio Rossi, both of CERN.

The neighborhood of CERN and the earlier International Superconductive Electronics Conference in Sorrento, Italy, in June of this year resulted in a strong weight of the program on superconducting magnets and materials, but superconducting electronics was also well represented. Excellent plenary talks started the scientific program on Monday, Tuesday and Wednesday and closed the Conference on Thursday: on Monday Ted Forgan of the University of Birmingham, UK, talked about the role of charge density waves in underdoped High-Tc materials, another step in trying to understand the origin of superconductivity in these materials. On Tuesday morning, Michael Eisterer of ATI Vienna (Austria) compared the physics and technology of Low-Tc and High-Tc Superconductors and their prospects for applications. The scientific program on Wednesday started with a talk by Huub Weijers of the National High Magnetic Field Laboratory in Tallahassee, USA, about the fascinating development of a 32 T superconducting magnet. The last and closing plenary talk of this conference was given by Pascal Febvre of the University of Savoie Mont Blanc, France. He addressed the recent developments in Superconducting Computing, in which not only the operating speed plays an important role, but even more the energy efficiency – a must for next generation supercomputers.

The organizers arranged an extremely well-attended “Industry Session – Superconductivity: From Industry to Society” on Tuesday afternoon, in which 4 talks addressed the influence of superconductivity on: The Industry of Energy (by Nobel Laureate Carlo Rubbia of CERN), the Industry of Science (by Frank Laukien, CEO of Bruker Corporation), the Electronics Challenge (by John Levy, Chairman of Hypres) and Large Scale Endeavors (by Jean-Luc Lancelot, Managing Director of SIGMA PHI, France). Each of these

talks was well attended, with part of the audience standing– the interest was far higher than expected – no wonder with such excellent talks.

Since CERN was in such close proximity, this allowed the conference dinner to take place at CERN: first a hands-on tour with the technical and scientific staff in different laboratories at CERN and then the conference dinner organized in two Magnet Test Halls: a combination of excellent food and drinks, scientific exhibition, quite a number of large magnets with competent people explaining their construction and their testing and use. This was an evening the participants will remember for a long time.

Looking back at the success of the conference, one can easily say, it was worth every minute: the location and organization were excellent and flawless, the selection of the themes for plenary talks was great, and the plenary speakers did an excellent job in making the talks interesting to an audience with quite a diverse background. The Industry Session wove the necessary link between the research side of applied superconductivity and the industrial needs and visions. The invited talks focused spotlights on especially interesting topics in the field and the level of these talks was excellent, as were most of the contributed talks and posters. The EUCAS 2017 was a truly international conference, bringing together scientists from academia and industry, by creating a stimulating atmosphere and an excellent infrastructure for the presentation of ideas and results.

We are looking forward to the next [European Applied Superconductivity Conference in Glasgow in 2019](#).