

Preface



The 16th international conference on RF superconductivity (SRF 2013) took place from September 23th to 27th 2013 in Cité Internationale Universitaire, Paris, France.

Hosted by Commissariat à l’Energie Atomique (CEA-IRFU) of Saclay and Institut de Physique Nucléaire d’Orsay (CNRS-IN2P3-IPN Orsay), the organization of the event was also supported by Grand Accélérateur National d’Ions Lourds (GANIL, Caen), Laboratoire de l’Accélérateur Linéaire (LAL Orsay), Laboratoire de Physique Subatomique et de Cosmologie (LPSC Grenoble) and Synchrotron Soleil.

411 delegates from 22 different countries attended the conference and nearly 120 persons followed the lab tours of CEA Saclay, Synchrotron Soleil, IPN Orsay and LAL Orsay. For the conference, 65 speakers were invited by the international program committee, and 370 abstracts (poster + talks) were proposed, which finally summed up into the 297 contributions presented in these proceedings. It is nearly 80 more contributions than the 2011 edition and it traduces the vitality of our community. The conference was preceded by 3 tutorials days held at Ganil, Caen, where 69 attendees followed the lectures related to Superconducting RF science and technology. They also had the opportunity to visit the site were the Spiral2 linac is being assembled.

Indeed during this event, we have heard about outstanding new results and we were glad to see than not only technical progress were reported, but also that many young scientist turned themselves to understanding of more theoretical aspects of RF superconductivity. The number of reported large scale projects is another proof of the dynamism of our community. We also had the chance to have two exceptional closing talks with Michel Brune (from the 2013 Nobel Prize awarded S. Haroche’s group) on “Quantum measurement with "trapped" microwave photons in a SRF cavity”, and Pr. Hitoshi Murayama on “Pathways to a Higgs Factory: International Linear Collider” (theme of the 2014 Nobel prize), showing that SRF is a key technology for the most advanced and recognized Physics topic.

We enjoyed a beautiful Parisian venue, including the gala dinner at the historical Salle Wagram where we all delegates shared a pleasant dinner accompanied by a “jazz manouche” band. The the SRF tradition was honored with a relaxing boat tour on the famous “bateaux-mouche”.

24 industrial partners and 7 institutional sponsors allowed us to sponsor fully or partially the coming of 37 students and young scientists and to issue two young scientist awards. The financial support to so many young scientists was possible in particular thanks to the CERN-

CATHI program. The best Young scientist Poster award, sponsored by Research Industry was attributed by the international committee to Takayuki Kubo (KEK) for his poster on “*Vortex Penetration Field in the Multilayered Coating Model*”, and the best young scientist talk, sponsored by Niowave, was attributed to Julia Vogt (HZ Berlin) for her talk “*High Qo Research : The Dynamic of Flux Trapping in SC Niobium*”.

We hope that you have enjoyed your stay at Paris and went back to your respective labs with renewed ideas and motivations to do even more excellent work on SRF. We also want to thank the Jacow edition board for their patient work in editing this final version of the proceedings.

Claire Antoine and Sébastien Bousson,
SRF2013 Chair and co-Chair

