

The Global COE Program

“The Next Generation of Physics, Spun from Universality and Emergence”

Bilateral International Exchange Program (BIEP, invite) report

Send report to: Your responsible Professor in Kyoto University

gcoe-biep@scphys.kyoto-u.ac.jp , gcoe-office@scphys.kyoto-u.ac.jp

(Year/Month/Day) 2009/07/13

Invited Student

Name	Paula Giraldo
University and Country	Universidad de Los Andes, Colombia
Grade	Master
Phone and FAX	57-1-4163216
e-mail address	pau-gira@uniandes.edu.co
URL	
Name and Position of Ph.D. advisor	Carlos Hernandez, Assistant Professor.
e-mail address of Ph.D. advisor	chernand@uniandes.edu.co

Responsible Researcher in Kyoto University

Name	Yoshiteru Maeno
Group and Faculty	Quantum Materials Lab, Department of Physics I
Position	Professor
e-mail address	maeno@scphys.kyoto-u.ac.jp
Phone and FAX	81-75-753-3783

Research Project

Title	Vortex Noise in Unconventional Superconductors
Duration	82 days

Please summarize your activities and results during your stay in Kyoto University.

Also please describe how your stay has been beneficial to the graduate students in the institute. You can add a sheet, if you need more space.

You can also write any comments and requests to the GCOE program.

During my stay in the Quantum Materials (QM) Lab in Kyoto University I continued on my research on Vortex Noise in the material YBCO, obtaining new result that will be presented in the JPS meeting; and at the final stage I made some measurements on a Pb-Sr₂RuO₄-Pb junction. On both stages I had close communication with the graduate students on the group, discussing with them about their and my research.

My stay was beneficial to the graduate students in the QM Lab because they could share about their research projects (and heard about mine) in English, which is very important to be prepared for an international meeting or to share and discuss results with other groups around the world. The international environment in this group is very appropriate to learn about the scientific language and production process, which in their case is build and increased with different tools: the English spoken colloquiums and seminars; the presence of researchers from other countries, which leads to share other laboratories experiences and way of work; the day-to-day interaction with internationals, which allows to share personal and scientific perspectives and ideas, as well as cultural exchange. In this process I was a tool to help this environment to increase and in this sense I think short stays as mine are beneficial

and they should be constant, with different laboratories and countries participants. I had the opportunity to discuss with other Japanese research groups during my stay, and I think the English level as well as disposition to internationals among graduate students on the QM group is very high. This is a strength build thanks to this kind of programs and fellowships.

I also shared with graduate students and professors a different transport measurements analysis technique, such as voltage noise, that can be implemented easily and with their facilities.

I would like to thanks BIEP-GCOE committee for bringing me to Kyoto University. And I specially would like to thanks Professor Y. Maeno and his group for their kindness, making my stay a great personal and professional experience.