

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) 2012/09/18

Invited Student

| | |
|------------------------------------|--|
| Name | Tevong You |
| University and Country | King's College London |
| Grade | PhD student |
| Phone and FAX | (+44)07970410170 |
| e-mail address | tevong@gmail.com |
| URL | |
| Name and Position of Ph.D. advisor | Professor John Ellis |
| e-mail address of Ph.D. advisor | John.ellis@cern.ch |

Responsible Researcher in Kyoto University

| | |
|-------------------|---------------------------------------|
| Name | Tatsuo Kobayashi |
| Group and Faculty | Theoretical High Energy Physics |
| Position | Assistant Professor |
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| Phone and FAX | |

Research Project

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| Title | 125 GeV Higgs in the NMSSM |
| Duration | 31 st July – 17 th September |

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 host institute. You can add a sheet, if you need more space.

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

I worked with Professor Kobayashi to investigate the implications of the recent discovery of a Higgs-like particle at ~125 GeV for supersymmetry in its minimal and non-minimal realisation. We looked at an interesting correlation between the possible enhancement of the signal in the diphoton channel and the muon g-2 anomaly, and are currently investigating the couplings of the Higgs in the NMSSM. The work is still in progress, we intend to continue these investigations and their connection with flavor-violating processes and electric dipole measurements.

I interacted with the graduate students over dinner, so they could practice their English speaking skills. I enjoyed my stay in the department, which has been a great experience both personally and professionally.