

The Global COE Program

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Bilateral International Exchange Program (BIEP, invite) report

Send report to: Your responsible Professor in Kyoto University

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2009/01/13

Invited Student

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Responsible Researcher in Kyoto University

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Research Project

Title	Preliminary Studies in Preparation for Writing a Masters Thesis
Duration	2008/12/08-2009/01/14
<p>The main motivation for my stay in Prof. Kunihiro's laboratory was to prepare for my upcoming masters thesis research project. As I will stay enrolled at the Technische Universität Darmstadt, this research project will be conducted under the joint supervision of Prof. Kunihiro and Prof. Wambach. My research interests are in the field of finite-temperature QCD, therefore this stay allowed me to acquaint myself with this exciting field and to discuss possible topics for my masters thesis with Prof. Kunihiro.</p> <p>To strengthen my theoretical background in finite-temperature QCD, I</p> <ul style="list-style-type: none">• attended T. Hirano's Intensive Lecture on “Relativistic Ideal and Viscous Hydrodynamics”• worked through chapters 1 to 7 of “Finite-Temperature Field Theory Principles and Applications” by J. Kapusta & C. Gale (2006) and discussed the contents with other students at Kyoto University• worked through chapters 1-3 of “QCD phenomenology based on a chiral effective Lagrangian”, T. Hatsuda & T. Kunihiro, Phys. Rep. 247, (1994). <p>Regarding the subject of my masters thesis, I agreed with Prof. Kunihiro on studying the region near the critical point of the QCD phase diagram within an effective model. Especially the role of vector interactions is going to be investigated.</p> <p>This stay at Kyoto University was in my opinion the best possible preparation for my masters thesis research project because it will enable me to start this research project without extensive preparation.</p> <p>I would like to thank Prof. Kunihiro for his supervision and his warm hospitality. Furthermore, I feel deeply indebted to the GCOE committee for granting me the scholarship and thus making my stay at Kyoto University possible.</p>	