東工大　基礎・物性物理学専攻「物理学リーダーシップ」

FGIP：Foreign Graduate Student Invitation Program

外国人博士課程大学院生の短期招待・共同研究

FGIP-Student Forum セミナー

Can Kadir Utku（Middle East Technical University, Turkey）

日時：2012 年 2月 2日（木） 11:30 ～ 12:10

場所：本館H155B号室（理学系セミナー室）

“Lattice QCD”

Abstract: Hadrons are bound states of quarks. The interactions of quarks that lead to the formation of hadrons are called strong interactions and it is believed that they are described by Quantum Chromodynamics (QCD). In the low energy limit, i.e. the limit that is relevant for the formation of hadrons, QCD has to be treated non-perturbatively. One of the non-perturbative methods that is based on the QCD Lagrangian itself is the Lattice QCD.

Lattice QCD is an approach which offers a method of calculating hadronic observables. It allows us to obtain information about hadron properties starting from first principles and without making any model-dependent assumptions. In this technique, QCD is formulated on a space-time lattice and the resulting equations are solved numerically on a computer. Lattice QCD has proved to be rather successful in predicting the spectral properties of mesons and baryons, as well as the parameters characterizing their interactions.

In this talk Lattice QCD formulation and some hadronic observables' results will be presented.

教員、修士課程大学院生の参加も歓迎します。

担当　内野 俊隆（内線2075）

FGIP-Guest student の滞在スケジュール

名前	大学	滞在期間	受入担当氏名
Can Kadir Utku	Middle East Technical University （トルコ）	1/30 – 2/25	内野俊隆
Yavaş Özlem	Bilkent University （トルコ）	1/30 – 2/25	田原弘量
REMOTO. Alberto	Universite de Nantes （フランス）	2/1 – 2/17	今野智之

http://www.phys.titech.ac.jp/leadership/fgip/index.html

FGIP-Student Forum 事務局　小林慶鑑　（内線 2369 ）