



**DOTTORATO DI RICERCA**  
UNIVERSITÀ DI PISA

**DIPARTIMENTO DI FISICA "ENRICO FERMI"**

Scuola di Dottorato in Scienze di base "Galileo Galilei"

**Ciclo di lezioni per il  
CORSO DI DOTTORATO IN FISICA**

**Dr. Kazunobu Maruyoshi**

*SISSA – Trieste*

**"N=2 Gauge Theory, Geometry and  
2d/4d correspondence"**

Abstract: I give a short lecture on recent developments on N=2 gauge theory in four dimensions. I first review the Seiberg-Witten solution of N=2 gauge theory which describes the low energy effective theory in Coulomb phase. Then, we see its geometric origin from type IIA/M-theory point of view, following Gaiotto's work, which gives us a new interpretation to N=2 gauge theory. Based on these, I explain the S-duality of quiver gauge theories, and the relation between N=2 gauge theories and conformal field theories in two dimensions.

**Mercoledì 14 Marzo 2012 ore 11:00**

**Giovedì 15 Marzo 2012 ore 11:00**

**Venerdì 16 Marzo 2012 ore 11:00**

**Aula 248 - I Piano Ed. C**

K.Konishi