



ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

PHYSICS COLLOQUIUM

Thursday, 16 May 2013

17:00 -18:00

3rd Floor Seminar Room

“Quantum computation using topological states of matter”

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Abstract

In this talk I will introduce the fascinating world of topological states of matter and the ways by which they may be exploited to carry out topological quantum computation. I will describe the building blocks for such computation, called non-abelian anyons. I will explain what are the physical systems in which they will be formed, how they can be detected and manipulated, and the means by which we may engineer them. Most importantly, my talk will NOT assume any prior knowledge of these scary-looking terms.