## CAMTP









CAMTP - Center for Applied Mathematics and Theoretical Physics and Faculty of Natural Sciences and Mathematics of the University of Maribor Maribor Slovenia, European Union

organize

### the 1st International Spring School on Physics

3 - 7 June 2013

## Introduction to Quantum Field Theory and Applications

### Lecturer: Professor Dr. Mirjam Cvetič

University of Pennsylvania, Philadelphia, USA & CAMTP, University of Maribor http://www.camtp.uni-mb.si/springschool http://www.physics.upenn.edu/people/standing-faculty/mirjam-cvetic http://www.physics.upenn.edu/ http://www.camtp.uni-mb.si/ http://www.fnm.uni-mb.si/

### Brief description of the lecture course:

Perturbative techniques (Feynman Diagrams) in interacting quantum field theory are developed for calculations of scattering processes. Both the tree-level and the systematic approach to loop corrections (renomalized perturbation) are developed. Primary applications will be to Quantum Electrodynamics, and possibly to the Standard Model of electroweak and strong interactions. Supporting Material: Peskin-Schroder: An Introduction to Quantum Field Theory

### Coordination, contact and registration:

Prof.Dr. Marko Robnik, Director of CAMTP, Robnik@uni-mb.si

# http://www.camtp.uni-mb.si/springschool