

Ruđer Bošković Institute
Division of Theoretical Physics
TWINNING LECTURES



H2020 CSA Twinning
Grant No: 692194

SELECTED TOPICS IN PHYSICS BEYOND THE STANDARD MODEL

DAMIR BECIREVIC

**Laboratoire de Physique Théorique (LPT),
Université Paris Sud (Orsay), France**

LECTURE 1

Monday, May 8, 10 a.m.

LECTURE 2

Tuesday, May 9, 10 a.m.

Venue: Lecture hall, Ivan Supek Wing

ABSTRACT:

We start from the Higgs sector of the Standard Model to evoke the hierarchy problem and some ways to solve it.

We first extend the Higgs sector by adding an extra doublet and describe the main issues and phenomenological consequences arising from the so-called Two Higgs Doublet Model (2HDM), and we recall how the hierarchy problem is solved in the supersymmetric extensions of the Standard Model. We then discuss the constructions of the theories with extra dimension(s) and how their compactification might lead to a 'solution' of the hierarchy problem.

2017.

ThPhys @IRB



<http://rbi-t-winning.irb.hr/>



This lecture series is delivered as part of the RBI-T-WINNING project which has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 692194.

