

# 4 PIECES OF NEW PHYSICS



UNIVERSITÀ  
DI PARMA

DEPARTMENT OF MATHEMATICAL,  
PHYSICAL AND COMPUTER SCIENCES

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## GOING BEYOND THE STANDARD PARADIGM

**ALBERTO SALVIO - CERN, GENEVA**

The Standard Model of the strong and electroweak interactions (SM) together with Einstein's general relativity (GR) is a very successful theory, which is able to explain all known interactions between the observed particles, including the recently discovered Higgs boson. There is, however, no doubt that both the SM and GR have to be extended. I will review some of the most important arguments that show the necessity of extending these standard paradigms and mention some extensions. I will also discuss what I think is a successful strategy in guessing the right path to go beyond such standard theory.

**10:30 - AULA MAXWELL**

**SEMINARS OPEN TO EVERYBODY**