

# Statistics course

**Physics @ LHC**  
**LIP - 13/05/2013**

- Experimental error
- Distribution & Probability / Sample of events
- Important distributions - Central Theorem
- Multi-variable distributions & error propagation
- Hypothesis testing - Maximum Likelihood

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## Disclaimers:

- 90 minutes: Too short to give a full-fledge course on statistics
- → This is a pragmatic introduction
- The material for “a given” full course is actually present: Based on syllabus of Pr. T. Nakada @ ETHZ:
  - Will be going through, insisting on important notions
  - Bringing examples in HEP
  - You're welcome to:
    - Take the time to go through the full course
    - Do the calculations
- Exercises will be provided & added at the end of this course