CERN Open Data

How to use it in education?
How to make it useful and interesting?

Contact: opendata-support@cern.ch
LHC
15,360 TB

Youtube
15,000 TB

Size of data sets in terabytes

- Business email sent per year: 2,986,100
- Content uploaded to Facebook each year: 182,500
- Google’s search index: 97,656
- Kaiser Permanente’s digital health records: 30,720
- Large Hadron Collider’s annual data output: 15,360
- Videos uploaded to YouTube per year: 15,000
- National Climactic Data Center database: 6,144
- Library of Congress’ digital collection: 5,120
- US Census Bureau data: 3,789
- Nasdaq stock market database: 3,072
- Tweets sent in 2012: 19
- Contents of every print issue of Wired: 1.26

Modified from https://www.wired.com/2013/04/bigdata/
Objectives

Create, work on, develop...
- Ready-to-roll exercises
  - Based on curriculum
- Project work
- Material for other teachers
  - Videos, tutorials
  - Background theory
- User Interface
- ...something creative?
You have the chance to

- Create activities around data analysis
- Set basics of programming at high school level
- Use interactive teaching tools
- Rediscover Nobel-Prize winning discoveries
- Search for new physics using CERN OpenData
“It has opened my eyes to new teaching methods”

Welcome!