

# Particle Therapy Masterclass

**Warsaw University of Technology (Poland)**

Tytuł?



**Faculty of Physics  
Warsaw University  
of Technology**

[www.physicsmasterclasses.org](http://www.physicsmasterclasses.org)



**INTERNATIONAL  
MASTERCLASSES**  
hands on particle physics

# Visual Analysis

Screenshots uczniów

# Large-scale Analysis

XX researchers

- analysed X treatment plans
- for beams of
- result: average from participants

# Large-scale Analysis

Ex 1

Ex 2

Ex 3

# Result

We **observed / didn't observe (?)**

- Difference between beams (photons, protons and carbon)
- Difficults of particle therapy planning
  - Treatment planning
  - Impact of uncertainties