

ANTIMATTER

TEACHING MODULE

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Education

Teaching Modules in Particle Physics



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Aim:



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To make modern physics (in particular, particle physics) interesting and exciting to students

AND...

do so at *earlier* stages in their science curriculum.



Education

We are designing Teaching Modules that...



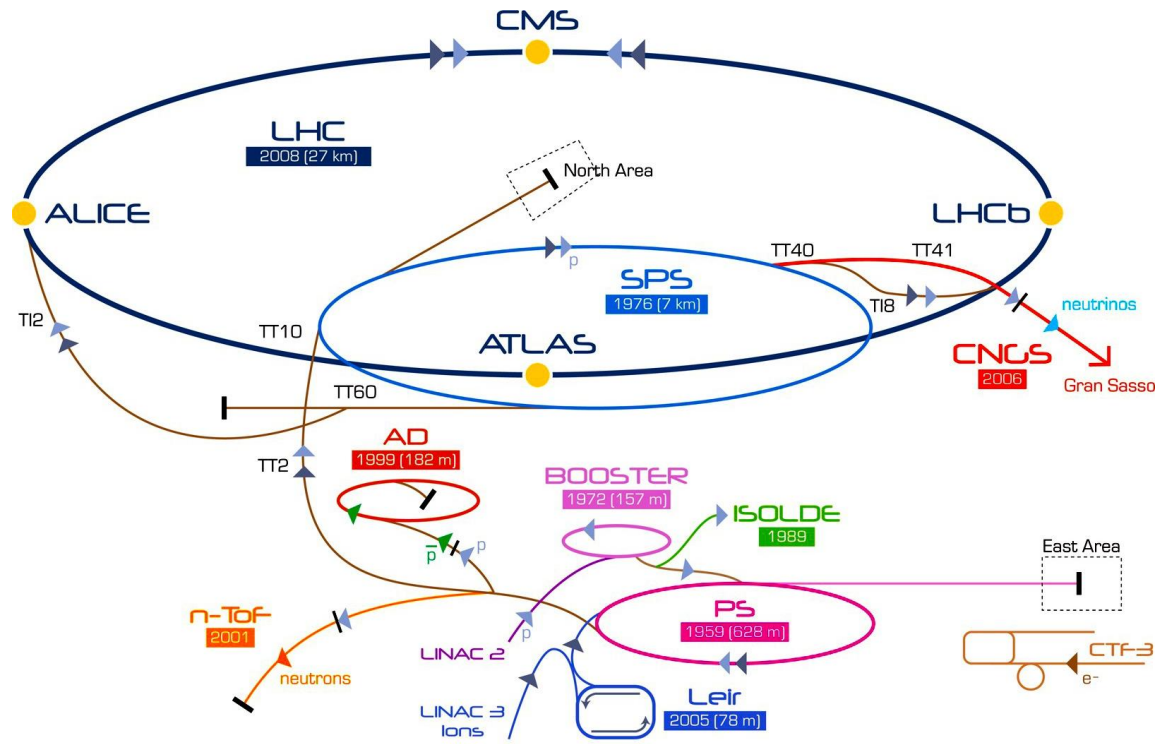
Education

We are designing Teaching Modules that...

Target students aged 14-15 years



...and that use topics that are related to the experiments being done at CERN.





Education

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Let's take a look at some statistics...



Education

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Eurobarometer Special Survey (2005):
(Europeans' general attitudes towards science and technology)

In a short quiz on the level of scientific knowledge in the general public,
of 13 true-or-false questions asked,
those related to modern *physics* were among the most poorly answered.

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Education

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Modern physics content in LOWER secondary school curricula:



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Norwegian National Curriculum in Natural Science (2006)

Achievement goals for students at the end of the 10th form:

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Biology: 56%

Chemistry: 50%

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Topics that could be considered as “modern”, according to subject:

Biology:	56%
Chemistry:	50%
Physics:	35%



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- * *Armenia, Iran, Italy, Lebanon, Netherlands, Norway, Philippines, Russia, Slovenia, Sweden*



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- ✓ A pedagogical platform was designed to deliver the basic concepts of antimatter in a way that would be accessible to students aged 14-15 years.
- ✓ A teaching module was developed consisting of 8 main lesson plans, 5 background lessons, and 2 extension lessons on antimatter.