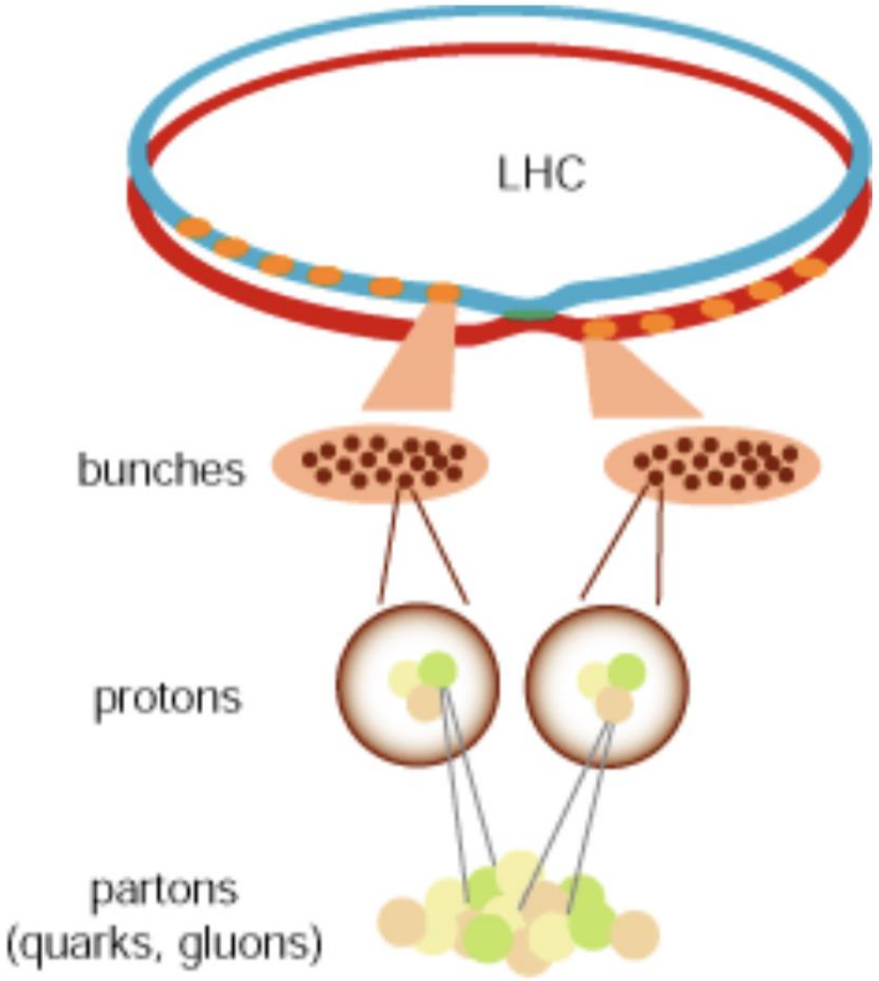
Closing comments

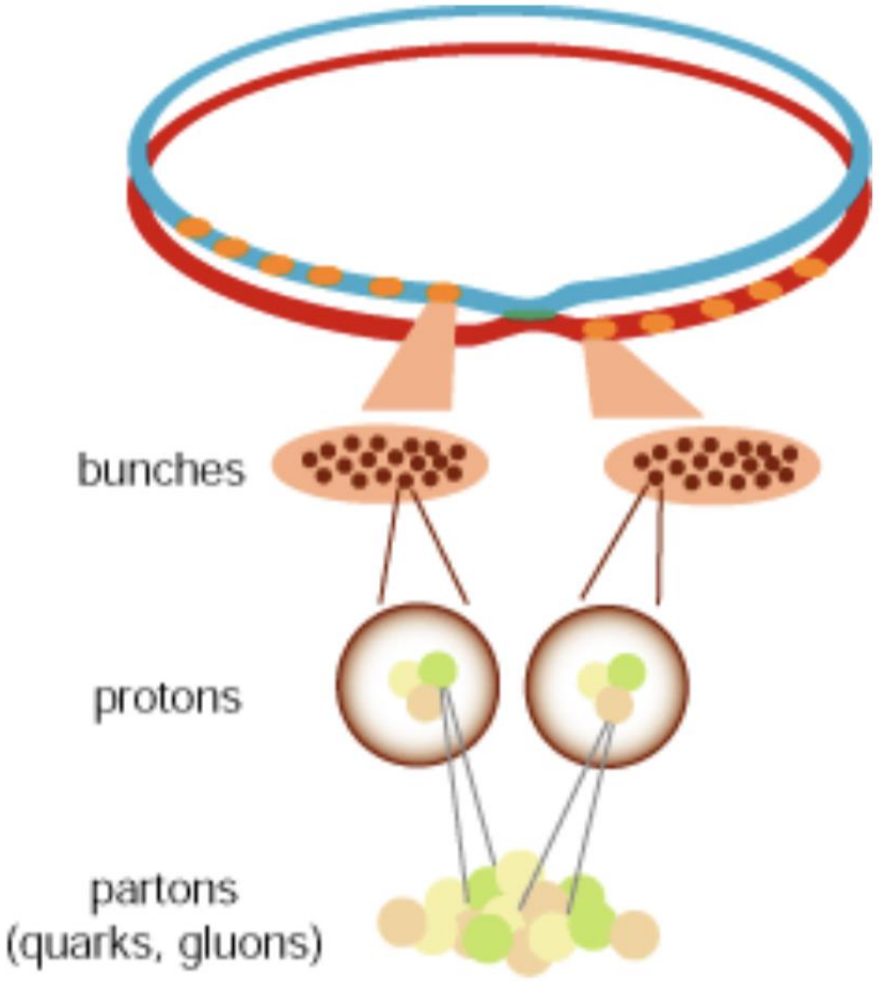
X. Buffat, T. Pieloni, L. Rivkin

BB2024 Lausanne

Beam-beam effects and wine analogy theory!



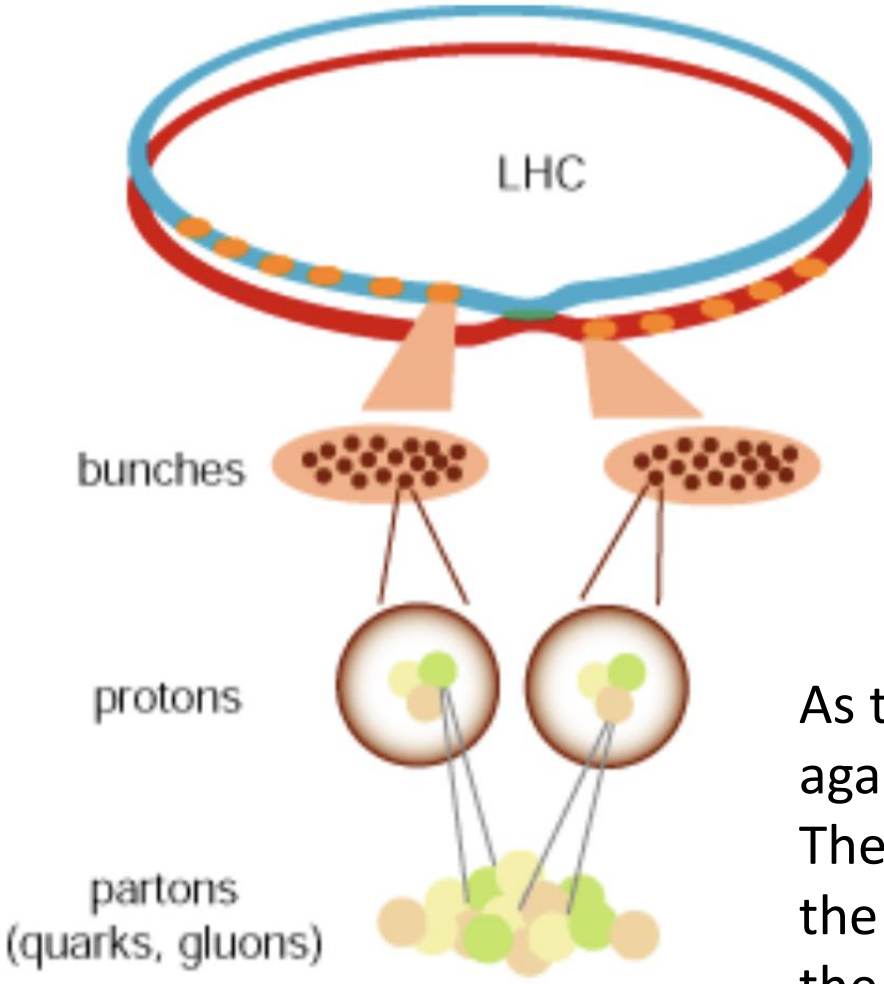
Beam-beam effects and wine analogy theory!



Man kind can shape, build and create beautiful things!
Not natural but beautiful…with dedication, motivation and hard work!
With a long, wise prospective!

Lavaux – Circular colliders (HERA,LHC, CEPC, FCC, EIC,…..)

Beam-beam effects and wine analogy theory!



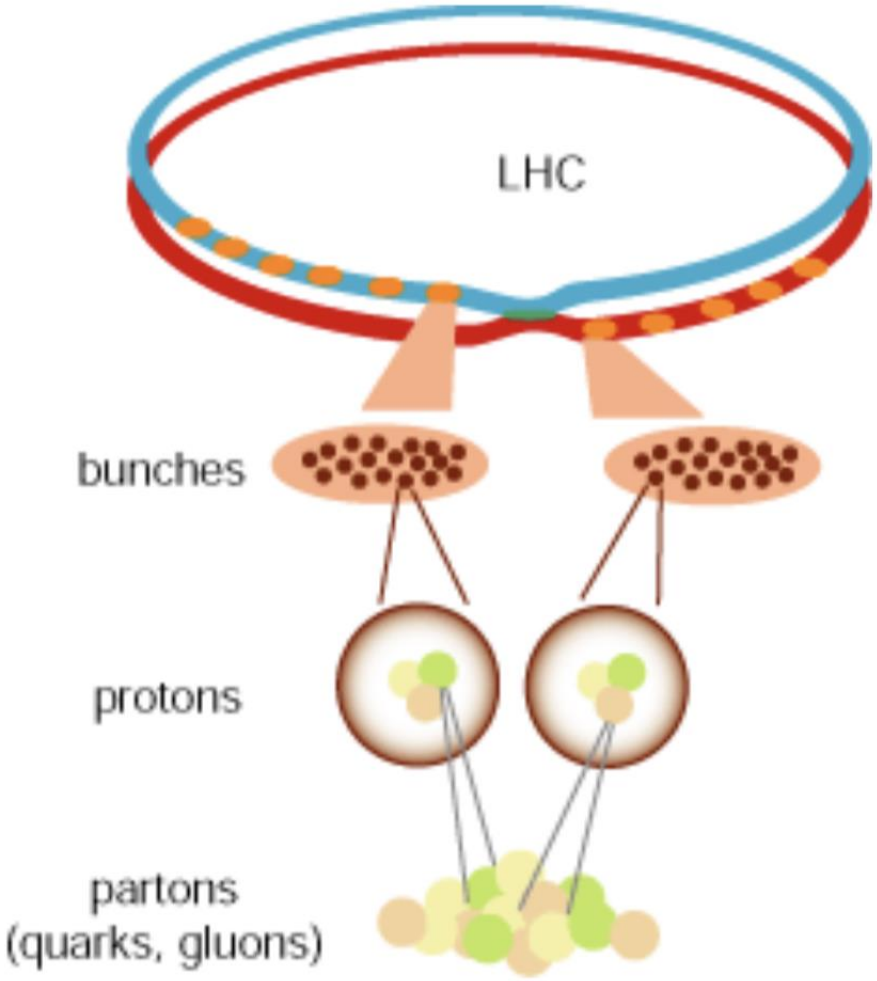
Our goals are beam quality and high luminosity to study rare physics events

We squeeze particles in the smallest dimensions to

To increase the chances of rare phenomena.

As the wine makers grow grapes and preserve them over the year against any climate or animal that might perturb the grapes. They grow in very small regions to give a peculiar final flavour to the grapes. But they also selectively keep the best grapes to push the final quality.

Beam-beam effects and wine analogy theory!



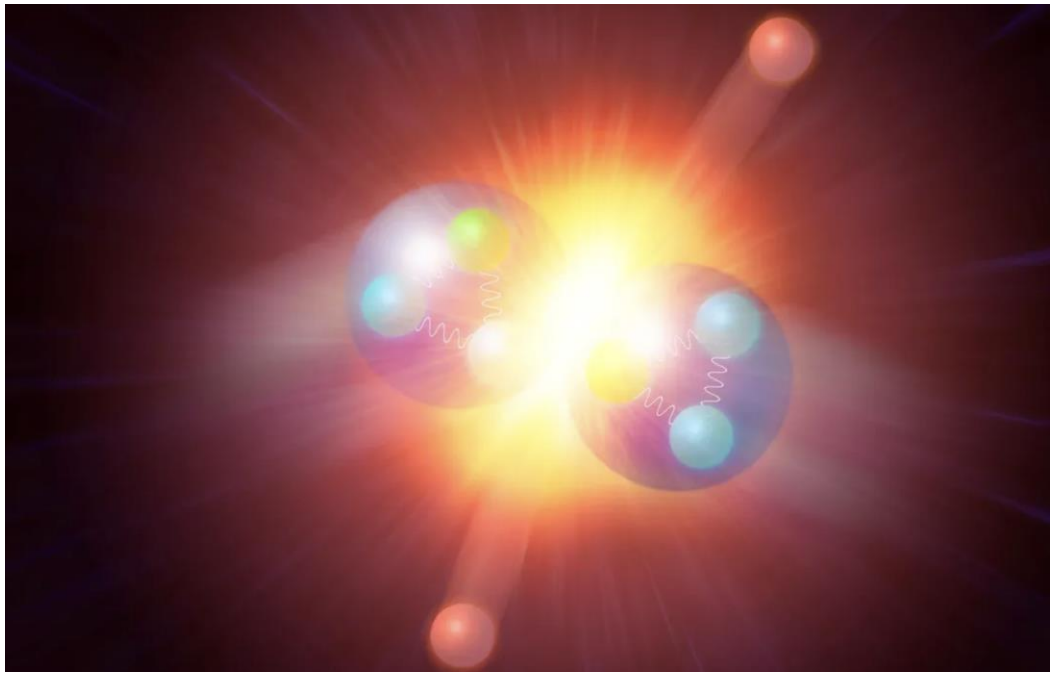
Smashing particles is not so dfferent from smashing grapes

When beams are ready we smash protons to see inside their components and take out the essence of physics processes!

As wine makers smash grapes to extract the juice of the fruits , their essence!

Beam-beam effects and wine analogy theory!

We contribute to create rare events



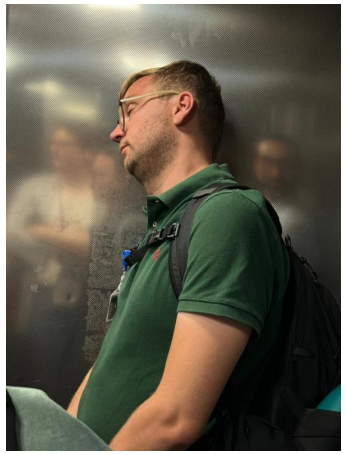
Artist's illustration of the Higgs boson being produced by two colliding protons. (Image credit: MARK GARLICK/SCIENCE PHOTO LIBRARY via Getty Images)

Elettricity cost: 200Euro/Higgs

They create wine

Domaine de la Romanee-Conti Grand Cru 1945 - $558,000

Pics of the workshop



Dinner Vaudoise

Lavaux experience

BB24 workshop

57 registrants : 50 in precence 7 on zoom

Motivations

- **Share progress** in the field: 49 high level contributions

Open and healthy discussions → collaboration above borders!

- **Identify challenges**: strong-strong limitations, simulations vs measurements, several circular colliders on the horizon
- **Build Vision**: models, benchamrk understanding well the present to extrappolate → how can we simulate the future machines?
- **Training next generation** accelerator experts: very young attendency 50/50 ratio.
- **Documenting** the state of the art

Proceedings

will be published as CERN Yellow report
Deadline 15th Nov 2024

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- Make a copy of the overleaf example
- Change directory name to Surname_abstractID
  - Abstract ID found here
  - E.g. vanRiesen-Haupt_ID22
- Upload figures in Figures repository
- Do not touch compile.tex
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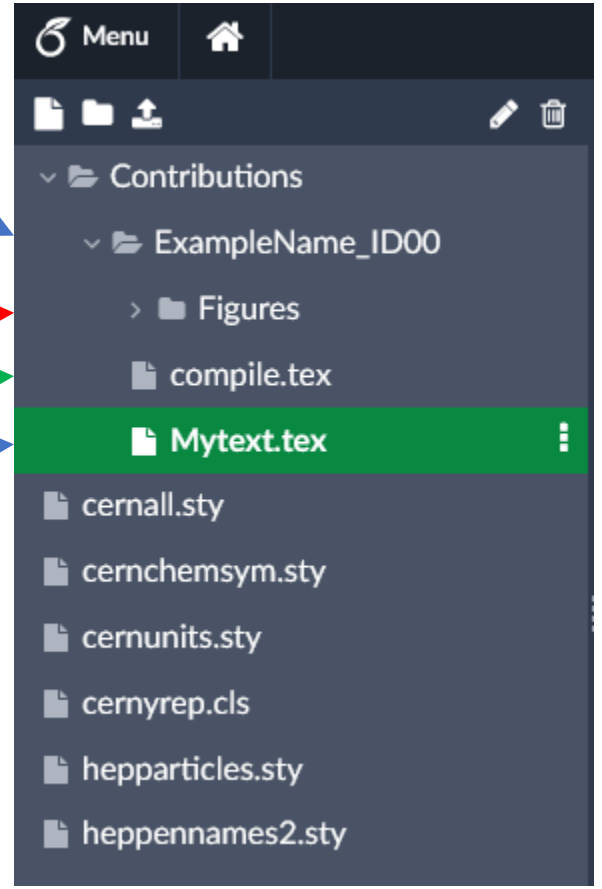
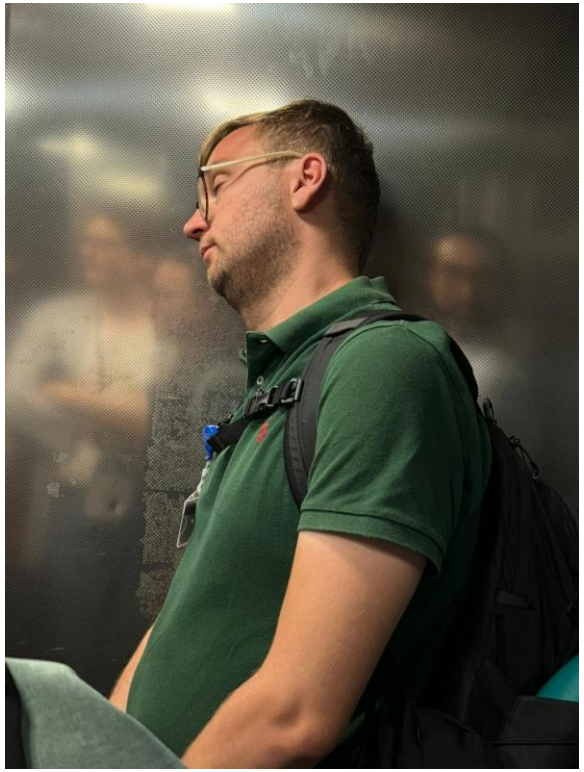
- Make unique labels and references with **abstract ID**:
  - IDXX_eq:*<equation name>*
  - IDXX_fig:*<figure name>*
  - IDXX_bib:*<source nam>*
- Use thebibliography and bibitem for bibliography





Thank you for your effort
and have a safe trip back !