

International Masterclasses in Particles Physics - expanding **geographically** and broadening in **scope**

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The recipe

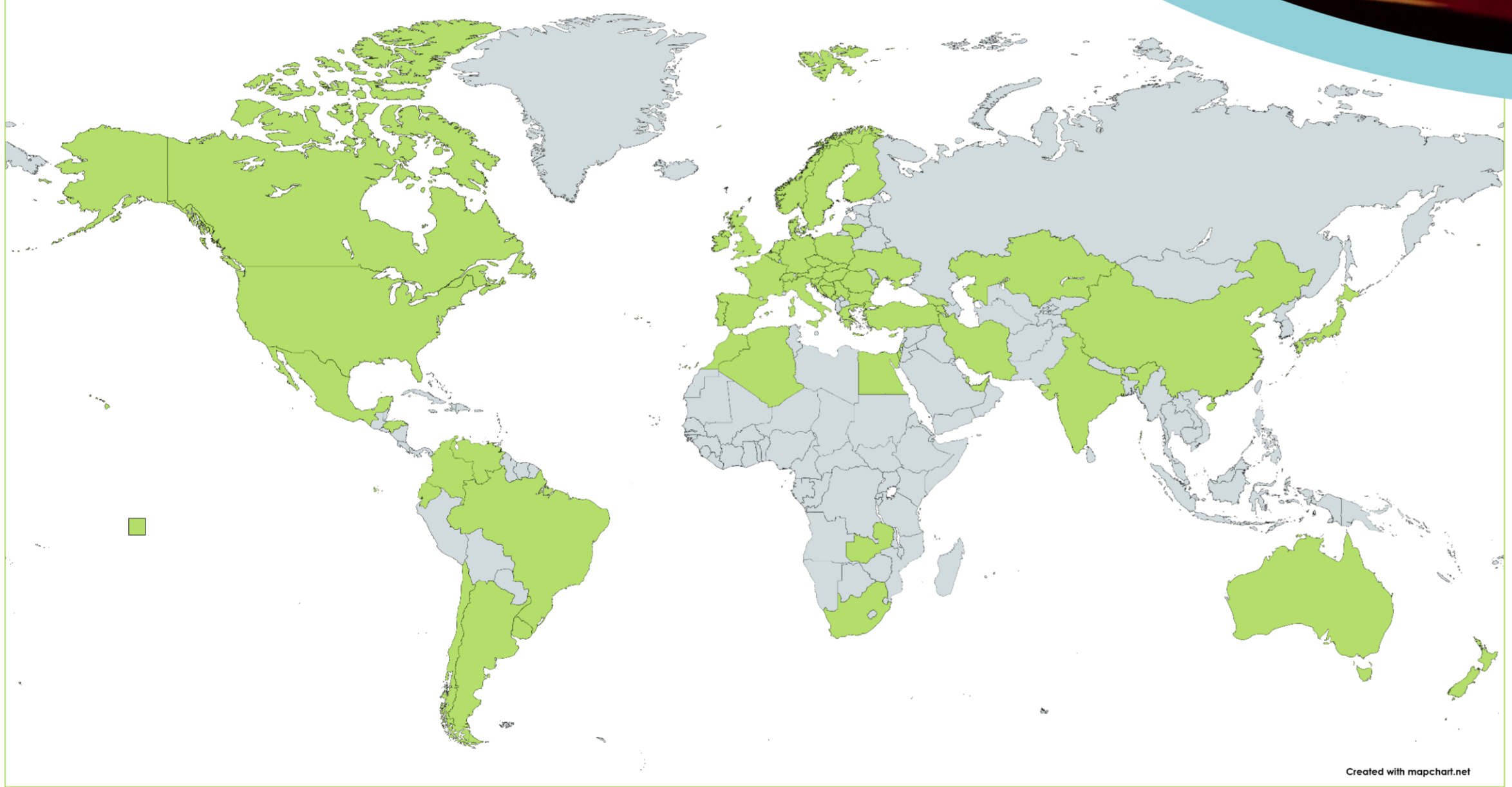
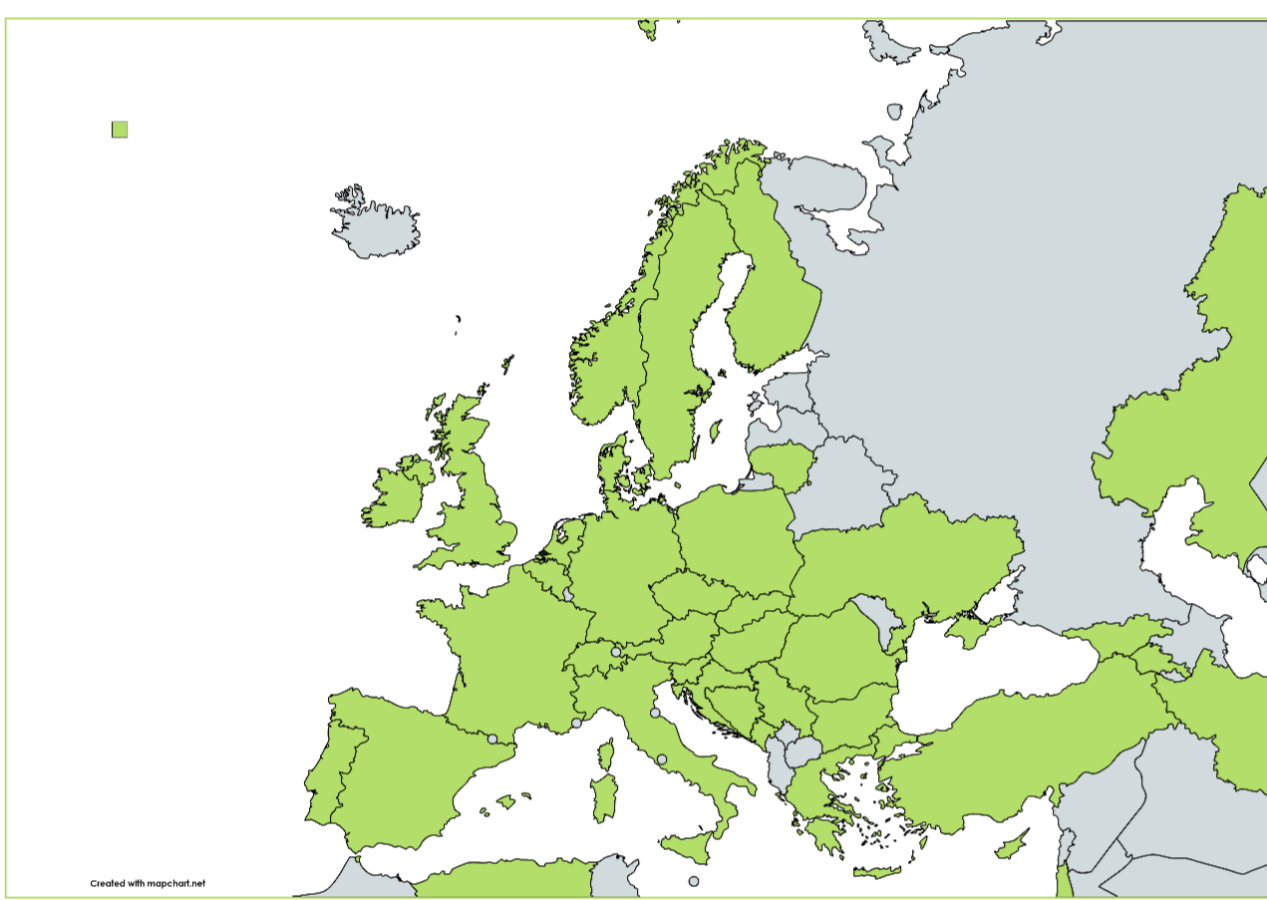
- Participants become scientists for one day
- ... perform a tailor-made physics analysis
- ... experience methods and tools used in research
- ... are supervised by physicists
- Results lead to new and fundamental insights
- All materials free to use for any educational purpose

Ingredients

- Target audience: High school students
- Also suitable for undergrads
- Participants are invited to a university/research lab
- Introductory talks
- Hands-on: measurement with real data
- Intl. videoconference (5 groups + moderators)

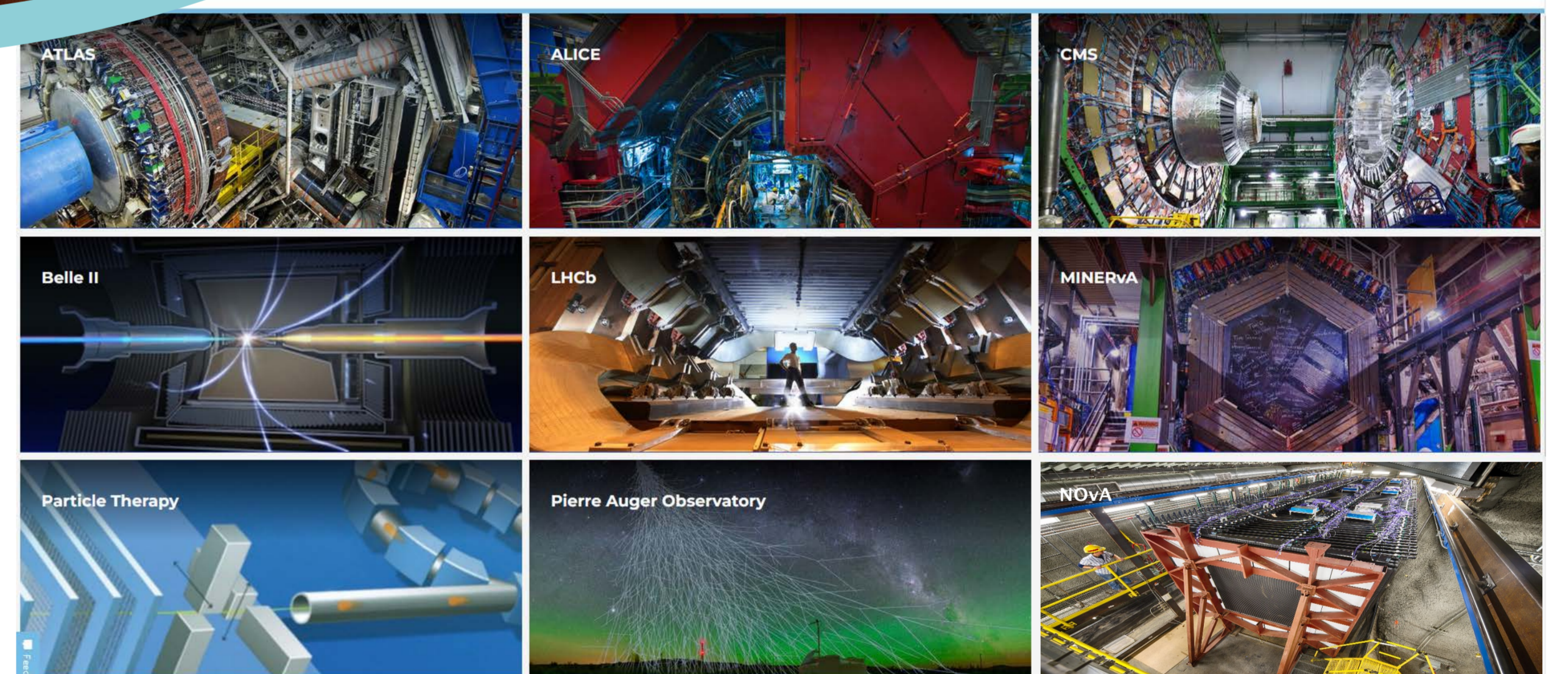
Truely international

- More than 200 research labs
- in 64 countries
- from A(lgeria) to Z(ambia)



Many flavours

- ALICE
- ATLAS
- CMS
- LHCb
- BELLE II
- MINERvA
- NOvA
- Pierre Auger
- Particle Therapy



Inspiring careers

- Excellent role models



PhD physicist at DESY, IMC moderator in 2021/22

I did this Masterclass in 2012 when in high school and that's why I decided to study physics so I would love to encourage people to join our community.

- 38% of PhD students holding Masterclasses attended a Masterclass as a high school student ¹
- IMC exert a positive nudge towards HEP and physics ²

¹ Unpublished results, survey 2024 in Germany with 323 persons, 34 responses

² J. Kekeláková, B. Tomášik, arXiv:2307.15906

How you can contribute/participate

- Get involved as tutor in a Masterclass at your research lab
- Help as a moderator with the video conferences in one of the moderation centers (CERN, Fermilab, KEK, GSI Darmstadt, Malargue...)
- Start Masterclasses at your institution. Resource requirements: One internet-capable computer per two students, presentation and videoconferencing facilities, appropriate room or hall.

More info: <https://cern.ch/df65u>
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