

Outreach hackathon

Carlos Cocha Toapaxi, Laura Boggia, Henrique Pineiro Monteagudo, Pratik Jawahar, Leon Bozianu, Daniel Magdalinski, Patin Inkaew, Micol Olocco, Sofia Cella, Max Amerl*, Danielle Wilson-Edwards*, Kaare Iversen*, Caterina Doglioni

*** affiliated students**

29/09/2024 - SMARTHEP yearly event @ Milan



SMARTHEP is funded by the European Union's Horizon 2020 research and innovation programme, call H2020-MSCA-ITN-2020, under Grant Agreement n. 956086

Part 1: Institute of Data Science and AI conference @ Manchester

June 3-4, 2024

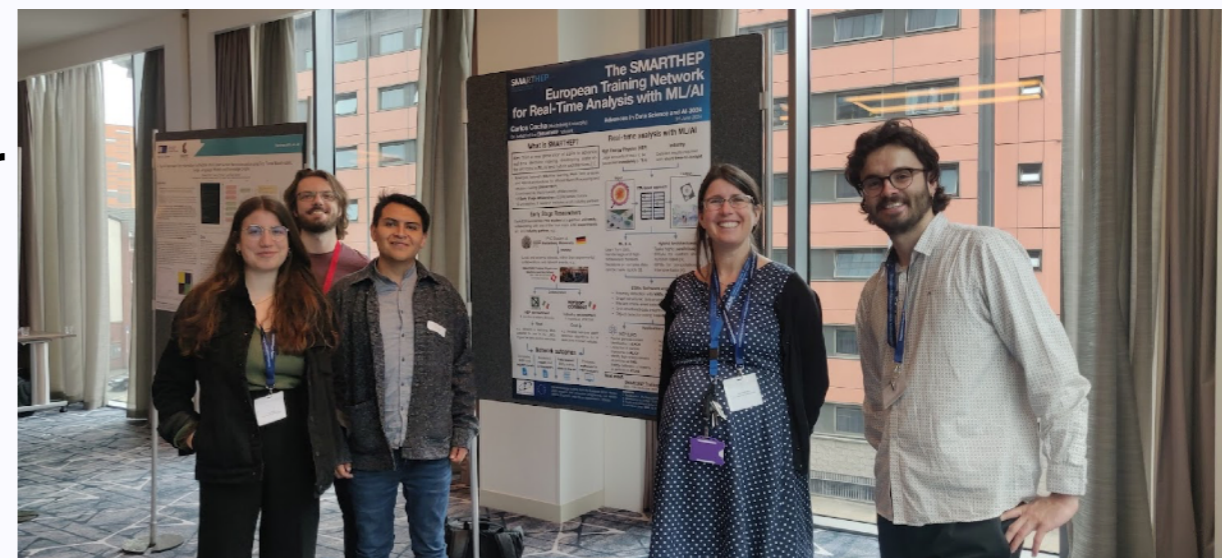


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Setting and goals

2-day conference on AI in research

- [Link to program](#)
- ESR had the chance to
 - Follow talks (keynote + invited talks, one on ML data compression)
 - Network with other researchers in AI at University of Manchester
 - Present a poster by Carlos Cocha Toapaxi



Part 2: Outreach talk & panel

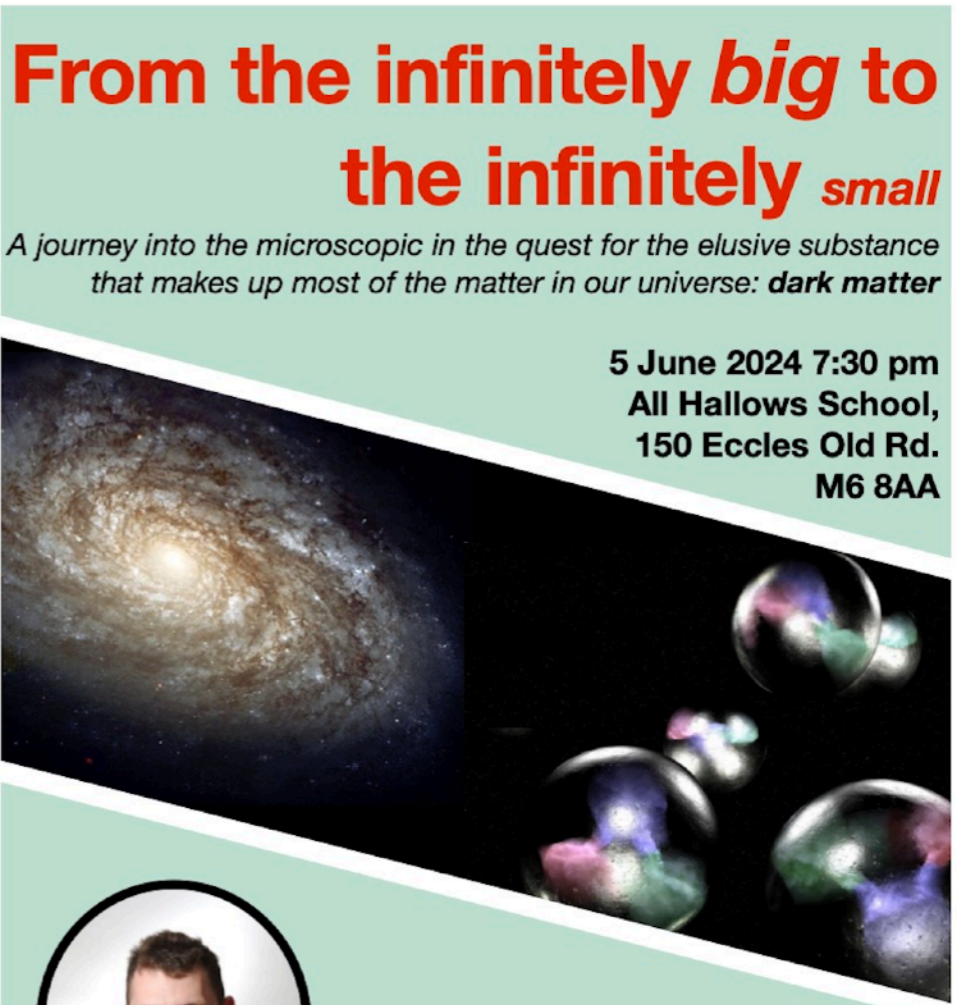
June 5, 2024



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Organisation & audience


- Organised by Salford Astronomical Society, near Manchester
 - Audience: general public with an interest in astronomy/physics
 - Talk by invited speaker (L. Corpe, ATLAS exotics convenor) + ESR panel
- ESR had the chance to
 - Discuss with the invited speaker + other researchers on anomaly detection
 - Listen/learn from outreach talk
 - Be part of panel discussion answering questions on very different topics



From the infinitely *big* to the infinitely *small*

*A journey into the microscopic in the quest for the elusive substance that makes up most of the matter in our universe: **dark matter***

5 June 2024 7:30 pm
All Hallows School,
150 Eccles Old Rd.
M6 8AA






Dr Louie Corpe is a British lecturer in experimental particle physics at Université Clermont Auvergne in France. He works on the ATLAS experiment of CERN's Large Hadron Collider, looking for hints of exotic new particles, including particles related to dark matter.

Photo Credit: Colin Gauld-Clark

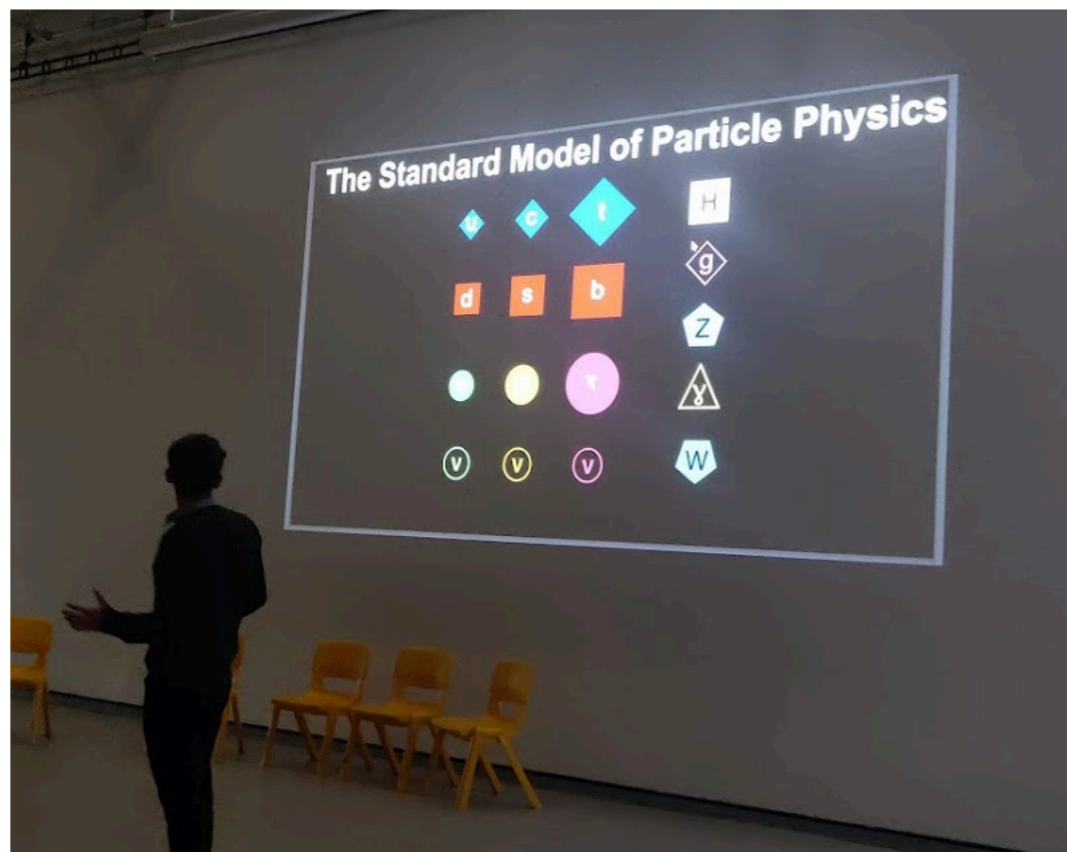
We will also host a Q&A with international PhD students in particle physics visiting the University of Manchester, so if you're a student thinking about a career in physics you can ask your questions about how to get into research!

Event organised and sponsored by



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Photos



Part 3: Physics for toddlers, Manchester bicentenary festival

June 8, 2024



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Main idea & goal

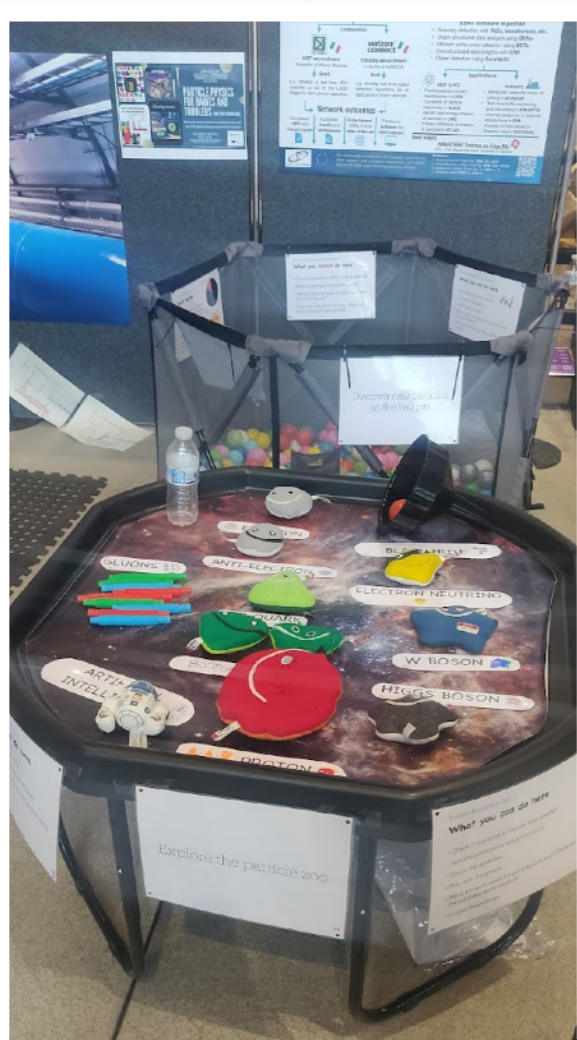
Age group: 1.5 - 5 years old

- ESR (+ other physicists) talk to parents while children play with particle physics-themed material
 - Tray with Standard Model particle zoo + gluons
 - Ball pit, to find “rare” particles (dark matter, B (bee) quarks, axions)
 - Big Lego-like blocks to build the Higgs discovery plots
 - Book-reading corner (particle physics for babies, by L. Corpe/IPPOG)
 - Background of LHC and particle physics posters
 - Table with material on parents network at UofM
- **Main goal:** lower barrier to entry, particle physics is not rocket science if there are elements that can be shared with toddlers/children
- **Secondary goal:** give examples of role models for underrepresented categories in the field (about 30% women in particle physics, decreasing with career stage)

Photos: preparation / setup



Photos: on the day



Part 4: HEPScAPE Escape Room

June 10-14, 2024



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Main idea & goal

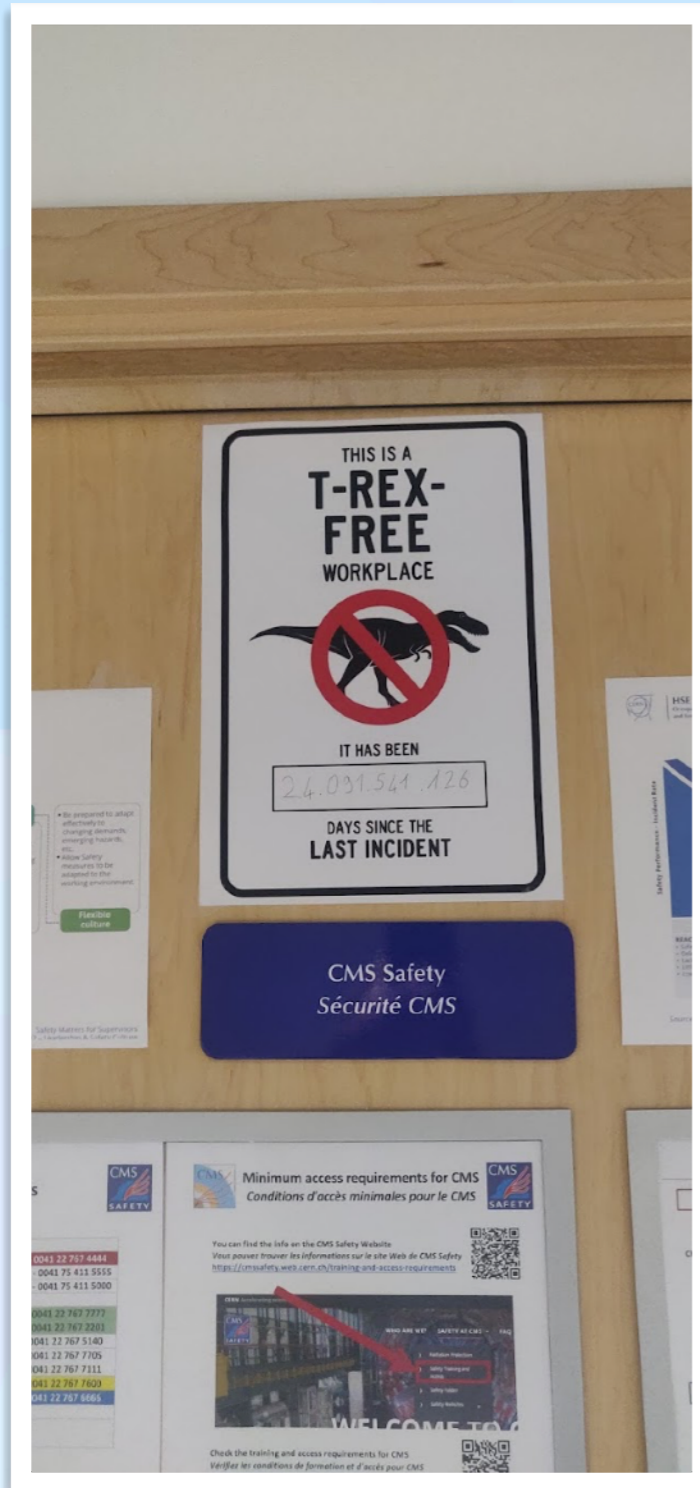
HEPScape background: see [this talk](#)

- Contribute to escape room for outreach in high energy physics, designed by INFN institutes in Italy
- What ESRs did / are doing:
 - Translate Italian script to their languages (English, German, Swedish, Thai + French)
 - Record videos in a professional studio at CERN
 - Video editing (Andrew Carey + this week)
 - Think of real-time analysis-based extensions alongside existing LHC-based escape room

Photos in IdeaSquare



Photos at CMS Point 5



Photos at CERN

