Talks at conferences and workshops

1. CERN EP-IT Data Science seminar   *CERN, Switzerland*
"Latest machine learning developments for the LHCb experiment"   *10th Jul. 2024*
Invited seminar (link). Julián García Pardiñas, on behalf of the LHCb collaboration.

2. CMS ML Hackathon: Anomaly Detection for monitoring, validation and discovery   *CERN, Switzerland*
"Reinforcement learning for automatic data quality monitoring in HEP experiments"   *2nd Jul. 2024*
Invited talk. Julián García Pardiñas.

3. Workshop: 7th General Meeting of the LHC EFT Working Group   *CERN, Switzerland*
"Recent LHCb results in $b \to c\tau\nu$ and $b \to sll$"   *24th Apr. 2024*
Invited plenary talk. Julián García Pardiñas, on behalf of the LHCb collaboration..

4. Conference: 58th Rencontres de Moriond EW Conference   *Val d'Aoste, Italy*
"$b \to c\tau\nu$ decays at LHCb"   *27th Mar. 2024*
Plenary talk. Julián García Pardiñas, on behalf of the LHCb collaboration.

5. Workshop: Software Framework(s) for LHCb's Future - LHCb internal   *Marseille, France*
"Common requirements and developments for ML infrastructure"   *24th Nov. 2023*
Plenary talk (protected link). Julián García Pardiñas and Maarten Van Veghel.

6. Workshop: Beyond the flavour anomalies IV   *Barcelona, Spain*
"Experimental perspective on $B_{(s)} \to K^{(*)0}\overline{K}^{(*)0}$ decays"   *20th Apr. 2023*
Invited plenary talk. Julián García Pardiñas.

7. Workshop: ML4JETS 2022   *Rutgers University, US*
"Graph Neural Networks for a Deep-learning based Full Event Interpretation (DFEI) at the LHCb trigger"   *4th Nov. 2022*
Julián García Pardiñas.

8. Conference: ICHEP 2022   *Bologna, Italy*
"A Deep-learning based Full-Event Interpretation (DFEI) algorithm for the identification and hierarchical reconstruction of heavy-hadron decay chains in proton-proton collisions"   *8th Jul. 2022*
Julián García Pardiñas.

9. Workshop: Beyond the flavour anomalies III   *IPPP, University of Durham, UK*
"The key open questions for the current measurements and predictions of R(D) and R(D*)"   *26th Apr. 2022*
Invited plenary talk. Julián García Pardiñas and Martin Jung.

10. Workshop: Weak Interactions and Neutrinos (WIN) 2021   *University of Minnesota, US*
"Anomalies in B decays, an experimental overview"   *11th Jun. 2021*
Plenary talk. Julián García Pardiñas, on behalf of the LHCb, ATLAS and CMS collaborations.

11. Workshop: Implications of LHCb measurements and future prospects   *CERN, Switzerland*
"Semileptonic decays at LHCb"   *17th Oct. 2019*
Plenary talk. Julián García Pardiñas, on behalf of the LHCb collaboration.

12. Swiss Physics Society & Austrian Physics Society Annual Meeting   *Zürich, Switzerland*
"CP violation in beauty and charm at LHCb"   *28th Aug. 2019*
Julián García Pardiñas.

13. Workshop: Weak Interactions and Neutrinos (WIN) 2019   *Bari, Italy*
"B-flavour anomalies in $b \to sll$ and $b \to cl\nu$ transitions at LHCb"   *5th Jun. 2019*
Julián García Pardiñas, on behalf of the LHCb collaboration.

14. Conference: La Thuile 2019   *Val d'Aoste, Italy*
"Searches for NP with rare, semileptonic, and radiative decays of heavy-flavour hadrons at the LHC"   *13th Mar. 2019*
Plenary talk. Julián García Pardiñas, on behalf of the LHCb and CMS collaborations.

15. Conference: SUSY 2018   *Barcelona, Spain*
"CP violation in B decays at LHCb"   *23rd Jul. 2018*
Julián García Pardiñas, on behalf of the LHCb collaboration.

16. Conference: 53rd Rencontres de Moriond EW *Val d'Aoste, Italy*
"Measurements of CPV in beauty at LHC" *11th Mar. 2018*
Plenary talk. Julián García Pardiñas, on behalf of LHCb, ATLAS and CMS.

17. Conference: 13th Rencontres du Vietnam *Quy Nhon, Vietnam.*
"Searches for LFU breaking at LHCb" *14th Aug. 2017*
Plenary talk. Julián García Pardiñas, on behalf of the LHCb collaboration.

18. Conference: CKM 2016 *Mumbai, India*
"CPV results from time-dependent analysis of $B_s^0 \to (K^+\pi^-)(K^-\pi^+)$" *1st Dec. 2016*
Julián García Pardiñas, on behalf of the LHCb collaboration.

Teaching activities

"2023 CERN-Fermilab Hadron Collider Physics Summer School" *CERN, Switzerland*
(https://indico.cern.ch/event/1234112/)
School targeted at young postdocs and senior PhD students.
• Discussion leader (22/08/2023 - 31/08/2023).

International summer school: "Advances in Artificial Intelligence" *Como, Italy*
(https://aisummerschool.disco.unimib.it/home)
• Lecture: "Graph Neural Networks for Particle Physics" (21/09/2022).

Courses at the University Zürich, B.Sc. Natural Sciences *Zürich, Switzerland*

• Physics I: coordinator of the exercise classes and exams (09/19 - 01/20 and 09/18 - 01/19).
• Physics II: coordinator of the exercise classes and exams (02/19 - 05/19).

Courses at the Uninversity of Santiago de Compostela, B.Sc. Physics *Santiago de Compostela, Spain*

• Mathematical Methods I: exercise classes (09/17 - 12/17).
• Nuclear and Particle Physics: exercise classes (09/17 - 12/17, 09/16 - 12/16 and 10/15 - 12/15).
• Experimental Techniques III: laboratory (02/17 - 05/17 and 01/16 - 05/16).
• Mathematical Methods III: exercise classes (01/16 - 05/16).

Outreach activities

CERN EP Newsletter article
Opinion article discussing aspects of machine learning for physics *Sep. 2024*
[In preparation]. Preliminary title: "Machine Learning in action: shaping the future of LHCb and fostering cross-experiment collaboration".

CERN Masterclass
Organised by universities in collaboration with CERN
Editions: 2021 LHCb Masterclass (UNIMIB, 02/21), 2017 CMS Masterclass (USC, 04/17), 2016 CMS Masterclass (USC, 03/16), 2015 CMS Masterclass (USC, 03/15), 2014 ATLAS Masterclass (USC, 03/14).

Summer Scientific Campus on the LHC for High School Students *Santiago de Compostela, Spain*
Organised by the University of Santiago de Compostela and the Spanish Government *1st of Jul. 2017 - 31st Jul. 2017*
Role: organiser, speaker and instructor during the lab sessions.