

# PUBLICATIONS LHCb – 11 MAY 2025

## article

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3. Observation of exotic  $J/\psi\phi$  resonances in diffractive processes in proton-proton collisions, R. Aaij *et al.*, LHCb Collaboration, *Phys. Rev. Lett* 134 (2025) 031902
4. Measurement of  $D^0 - \bar{D}^0$  mixing and search for  $CP$  violation with  $D^0 \rightarrow K^+\pi^-$  decays, R. Aaij *et al.*, LHCb Collaboration, *Phys. Rev. D* 111 (2025) 012001
5. Measurement of  $CP$  violation in  $B^0 \rightarrow D^+D^-$  and  $B_s^0 \rightarrow D_s^+D_s^-$  decays, R. Aaij *et al.*, LHCb Collaboration, *J. High Energy Phys.* 01 (2025) 061
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7. Measurement of the CKM angle  $\gamma$  in  $B^\pm \rightarrow DK^*(892)^\pm$  decays, R. Aaij *et al.*, LHCb Collaboration, *J. High Energy Phys.* 02 (2025) 113
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1. Measurement of  $\Xi_c^+$  production in  $p\text{Pb}$  collisions at  $\sqrt{s_{NN}} = 8.16$  TeV at LHCb, R. Aaij *et al.*, LHCb Collaboration, *Phys. Rev. C* 109 (2024) 044901

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9. Rare Decays with LHCb, G. Mancinelli, indéfini, International conference : Beyond The Standard Model of Particle Physics (2012), Quy Nhon, Vietnam, 15-21 Jul 2012

2011

1. Search for New Physics with Rare Heavy Flavour Decays at LHCb, G. Mancinelli, indéfini, 35th International Conference on High Energy Physics (2011), Paris, France, 22-28 Jul 2010

2. Operation and Performance of the LHCb experiment, F. Alessio, indéfini, Workshop on Discovery Physics at the LHC (2011), Mpumalanga, South Africa, 5-10 Dec 2010
3. Summary of WG4: Lifetime, mixing and weak mixing phase in charm and beauty, including direct determination of  $V_{tx}$ , M. Kreps, A. Lenz, O. Leroy, indéfini, 6th International Workshop on the CKM Unitarity Triangle (2011), Warwick, United Kingdom, 6-10 Sep 2010
4.  $b \rightarrow \mu^+ \mu^-$  and  $b \rightarrow s \mu^+ \mu^-$  at LHC, G. Mancinelli, indéfini, Flavor Physics and CP Violation 2011 (2011), Maale Hachamisha, Israel, 23-27 May 2011
5. Near beam-gas background for LHCb at 3.5 TeV, D. R. Brett, R. B. Appleby, G. Corti, F. Alessio, R. Jacobsson, V. Talanov, M. H. Lieng, indéfini, 2nd International Particle Accelerator Conference (2011), San Sebastian, Spain, 4-9 Sep 2011
6. Search for the rare decays  $B_{(s)}^0 \rightarrow \mu^+ \mu^-$  at LHCb, J. Serrano, indéfini, 2011 Europhysics Conference on High Energy Physics (2011), Grenoble, France, 21-27 Jul 2011
7. Search for  $B_s^0 \rightarrow \mu^+ \mu^-$  and  $B_d^0 \rightarrow \mu^+ \mu^-$ , M. Perrin-Terrin, indéfini, Physics at LHC 2011 (2011), Perugia, Italy, 6-11 Jun 2011

2010

1. Study for the LHCb readout board, J.-P. Cachemiche, P.-Y. Duval, F. Hachon, R. Le Gac, F. Marin, indéfini, 5, TWEPP 2010 Topical Workshop on Electronics for Particle Physics (2010) C12036, Aachen, Germany, 20-24 Jun 2010
2. LHCb prospects for full energy and beyond (incl. upgrades), R. Le Gac, indéfini, Hadron Collider Physics Symposium 2010 (2010), Toronto, Canada, 23-27 Aug 2010
3. Recherche de la Nouvelle Physique dans les Désintégrations  $B_s^0 \rightarrow J/\psi \phi$  avec le Détecteur LHCb auprès du LHC, E. Maurice, indéfini, Journées Jeunes Chercheurs (JJC2010) (2010), Angers, indéfini, 21-27 Nov 2010
4. Search for  $BR(B_s \rightarrow \mu^+ \mu^-)$  at the LHCb experiment, C. Adrover, indéfini, Journées Jeunes Chercheurs (JRJC2010) (2010), Nantes, France, 21-27 Nov 2010

## présentation orale

2024

1. First experience with LHCb GPU-based software trigger, Poluektov, Anton, 2024 European Edition of the International Workshop on the Circular Electron-Positron Collider (CEPC), Marseille, France, 8-11 Apr 2024
2. Lepton Flavour Universality tests using semileptonic b-hadron decays, Chen, Chen, 31st International Workshop on Deep Inelastic Scattering, Grenoble, France, 8-12 Apr 2024

3. Software framework for HL-LHC reconstruction, **Morris, Andy**, 12th Edition of the Large Hadron Collider Physics Conference, Boston, United States, 3-7 Jun 2024

2023

1. Status of LHCb experiment and results on exotic hadrons, **Poluektov, Anton**, Accomplishments and mysteries in quark flavor physics (KM 50), Tsukuba, Japan, 9-11 Feb 2023
2. Double charm B-decays @ LHCb and b-factories, **Poluektov, Anton**, Open LHCb Workshop on semileptonic exclusive  $b \rightarrow c$  decays, Rome, Italy, 12-14 Apr 2023
3. Latest exotic spectroscopy results from LHCb, **Chen, Chen**, Exotic Hadron Spectroscopy 2023, Durham, United Kingdom, 19-21 Apr 2023
4. Analyzing 5 TB/s of data in real-time at the LHCb experiment at CERN, **Vom Bruch, Dorothea**, ICS High Performance 2023, Hamburg, Germany, 21-25 May 2023
5. Lepton Flavour Universality tests using semileptonic b-hadron decays, **Benane, Gaya**, HADRON2023, Genova, Italy, 5-9 Jun 2023
6. First experiences with the LHCb heterogeneous software trigger, **A. Morris**, Connecting The Dots (CTD 2023), Toulouse, France, 10-13 Oct 2023
7. Combined angular analysis of  $B \rightarrow D^* \tau$  and  $B \rightarrow D^* \mu$  at the LHCb detector, **D. vom Bruch, B. Kutsenko, A. Poluektov**, GDR-InF Annual Workshop 2023, Mont Sainte-Odile, France, 6-8 Nov 2023

2021

1. Real-time track reconstruction with GPUs, **D. Vom Bruch**, DPG Spring Meeting 2021, Dortmund, Germany, 15-19 Mar 2021
2. Rare decays at LHCb, **J. Cerasoli**, 28th International Workshop on Weak Interactions and Neutrinos (WIN 2021), Online, indéfini, 7-12 Jun 2021
3. Prospects for  $b \rightarrow s \tau^+ \tau^-$  and related decays at LHCb, **J. Cerasoli**, Mini-workshop on missing particle signatures and new physics at Belle II and LHCb, virtual, indéfini, 5-6 Jul 2021
4. Rare decays at LHCb, **J. Cerasoli**, 20th Lomonosov Conference on Elementary Particle Physics, Moscow, Russia, 19-25 Aug 2021
5. Status and future prospects of Lepton Universality tests at LHCb, **R. Puthumanai**, NuFact 2021: The 22nd International Workshop on Neutrinos from Accelerators, , indéfini, 6-11 Sep 2021
6. CP violation in  $b$  baryon decays at LHCb, **A. Poluektov**, The International Workshop on Partial Wave Analyses and Advanced Tools for Hadron Spectroscopy (PWA12/ATHOS7), Bristol, United Kingdom, 6-10 Sep 2021

7. Searches for effects Beyond the Standard Model in semileptonic decays of B mesons at LHCb, **V. Dedu**, Journées de Rencontre des Jeunes Chercheurs 2021, La Rochelle, France, 17-23 Oct 2021
8. Search for CPV in  $B \rightarrow D^* \mu \bar{\nu}_\mu$  at LHCb, **V.-G. Dedu**, GDR-InF annual workshop 2021, Paris, France, 15-17 Nov 2021
9. Measurements of the Unitarity Triangle angle  $\alpha_1$  at LHCb, **A. Poluektov**, GDR-InF annual workshop 2021, , indéfini, 15-17 Nov 2021
10. Summary of WG5: Direct CP violation (DCPV) including  $\phi_3/\gamma$  from  $B \rightarrow DK$ , DCPV effects, branching fractions and polarisation in charmless  $B_{(s)}$  decays, J. Brod, **R. Puthumanaim**, W. Qian, 11th International Workshop on the CKM Unitarity Triangle (CKM 2021), Melbourne, Australia, 22-26 Nov 2021
11. LHCb data processing, **D. Vom Bruch**, Workshop IX on Streaming Readout, , indéfini, 8-10 Dec 2021
12. Flavor Physics Summary, **O. Leroy**, 13th France China Particle Physics Laboratory workshop (FCPPL2021), , indéfini, 13-16 Dec 2021

2020

1. Software trigger for upgraded LHCb detector, **A. Poluektov**, Instrumentation for Colliding Beam Physics, Novosibirsk, Russia, 24-28 Feb 2020
2. TensorFlow as a compute engine in HEP analyses Experience with amplitude analyses at LHCb, **A. Poluektov**, 142nd LHCC Meeting, CERN, Switzerland, 4-5 May 2020
3. Recent results from charged-current semileptonic B decays at LHCb, **D. Gerstel**, 18th Conference on Flavor Physics and CP Violation, Illa Da Toxa, Spain, 8-12 Jun 2020
4. Oscillations of  $B_s^0$  mesons as a probe of decays with unreconstructed particles, **A. Poluektov**, 40th International Conference on High Energy Physics (ICHEP 2020), Prague, Czech Republic, 28 Jul - 6 Aug 2020
5. Measurement of the Unitarity Triangle angle  $\alpha_1$  at LHCb, **A. Poluektov**, 19th International Conference on B-Physics at Frontier Machines, Virtual World, Japan, 21-24 Sep 2020
6. Introduction to TensorFlow and its use as a compute engine for HEP, **A. Poluektov**, GDR Intensity Frontier "Hands on" project on GPU and vectorization, Virtual, France, 30 Sep - 15 Oct 2020
7. Anomalies in  $b \rightarrow c \tau \nu$  transitions at LHCb, **R. Puthumanaim**, GDR-InF annual workshop, Virtual, France, 28 Sep - 16 Oct 2020
8. Polarisation in heavy-meson decays, **A. Poluektov**, Polarisation measurements in ee, ep, pp and heavy-ion collisions, Paris, France, 14-18 Dec 2020

2019

1. Hadron spectroscopy at LHCb, **A. Poluektov**, Annual meeting of German LHCb groups (theory and experiment), Rostock, Germany, 1 Oct 2019
2. Lepton Flavor Violation in rare B decays, **G. Mancinelli**, Standard Model @ LHC 2019, Zurich, Switzerland, 23-26 Apr 2019
3. Gamma and Dalitz plot analyses, **A. Poluektov**, K. Trabelsi, GDR intensity frontier lectures, Paris, France, 28-29 May 2019
4. Searches for Lepton Flavour Violating decays at LHCb, **C. Meaux**, The 27th International Workshop on Weak Interactions and Neutrinos, Bari, Italy, 3-8 Jun 2019
5.  $CP$  violation in multi-body charmless  $b$ -hadron decays at LHCb, **A. Morris**, European Physical Society Conference on High Energy Physics (EPS-HEP) 2019, Ghent, Belgium, 10-17 Jul 2019
6. Prospects with taus at LHCb, Belle II and more. . . , **J. Serrano**, 7th Workshop on Rare Semileptonic B Decays, Lyon, France, 4-6 Sep 2019
7. Conventional hadron spectroscopy at LHCb, **A. Poluektov**, Implications of LHCb measurements and future prospects, Cern, Switzerland, 16-18 Oct 2019
8.  $b \rightarrow s\ell\ell$  transitions @ LHCb, **J. Cogan**, GDR- InF annual workshop, Sommieres, France, 04-06 Nov 2019
9. Lepton Flavour universality in  $b \rightarrow c$  transitions, **A. Morris**, GDR-InF annual workshop, Sommieres, France, 04-06 Nov 2019
10.  $I\tau$  takes a Village, **G. Mancinelli**, GDR- InF annual workshop, Sommieres, France, 04-06 Nov 2019
11. Flavour physics: From correlations to new probes, **J. Cerasoli**, GDR-InF annual workshop, Sommieres, France, 04-06 Nov 2019
12.  $B^0 \rightarrow K^*\tau^+\tau^-$  Testing Lepton Flavor Universality with the decay at the LHCb experiment, **J. Cerasoli**, Journées de Rencontre des Jeunes Chercheurs 2019, Logonna-Daoulas, France, 24-30 Nov 2019

2018

1. LHCb prospects for measurements of UT angles, **A. Poluektov**, XIII Meeting on B Physics : Synergy between LHC and SUPERKEKB in the Quest for New Physics, Marseille, France, 1-3 Oct 2018
2. Lepton flavour universality violating B decays in trees, **A. Morris**, XIII Meeting on B Physics: Synergy between LHC and SUPERKEKB in the Quest for New Physics, Marseille, France, 1-3 Oct 2018
3. LHCb Upgrade(s), **R. Le Gac**, GDR-InF workshop: The future of the intensity frontier?, Genève, Switzerland, 1-2 Feb 2018
4. SM tests in rare B decays with tau leptons in the final state, **G. Mancinelli**, Towards the Ultimate Precision in Flavour Physics, London, United Kingdom, 16-18 Apr 2018

5. New Physics searches using Lepton Flavour Universality tests at LHCb, **O. Leroy**, 11th France China Particle Physics Laboratory workshop (FCPPL2018), Marseille, France, 22-25 Mai 2018
6. Tests of lepton universality with semitauonic b-quark decays, **O. Leroy**, XXXIX International Conference on High Energy Physics, Seoul, South Korea, 4-11 Jul 2018
7. Using TensorFlow for amplitude fits: The TensorFlowAnalysis package, **A. Morris**, A. Poluektov, A. Mauri, A. Merli, A.Mathad, M. Martinelli, PyHEP workshop, Sofia, Bulgaria, 7-8 Jui 2018
8. Lepton Flavor Violating B decays at LHCb, **J. Arnau Romeu**, 16th Conference on Flavor Physics and CP Violation (FPCP 2018), Hyderabad, India, 14-18 Jul 2018
9. Tests of lepton flavour universality using semitauonic B decays at LHCb, **A. Morris**, 10th International Workshop on the CKM Unitarity Triangle, Heidelberg, Germany, 17-21 Sep 2018
10. Rare  $B$  decays with final state including  $\tau$  leptons, **J. Cogan**, XIII Meeting on B Physics : Synergy between LHC and SUPERKEKB in the Quest for New Physics, Marseille, France, 01-03 Oct 2018
11. Tests of Lepton Flavour Universality using semitauonic decays at LHCb, **D. Gerstel**, O. Leroy, A. Morris and R(D\*) Run1 proponent, The GDR-InF annual workshop, Arles, France, 5-7 Nov 2018
12. Rare heavy mesons decays to leptons, **C. Méaux**, G. Mancinelli, J. Serrano, A. Bharucha, D. Boito, GdR workshop, Paris, France, 7-12 Jun 2018

2017

1. Exclusive  $b \rightarrow s\tau^+\tau^-$  Decays from LHCb, **K. De Bruyn**, Workshop Current Trends in Flavor Physics, Paris, France, 29-31 Mar 2017
2. Using virtualized computing resources with the DIRAC Interware, **A. Tsaregorodtsev**, International Symposium on Grids and Clouds, Taipei, Taiwan, 5-10 Mar 2017
3. New physics searches with  $b \rightarrow sl^+l^-$  transitions and rare decays at LHCb, **K. De Bruyn**, XXXI Rencontres de Physique de La Vallée d'Aoste, La Thuile, Italy, 5-11 Mar 2017
4. Searching for  $B \rightarrow \tau^+\tau^-$  Decays, **K. De Bruyn**, Rencontre de Physique des Particules (RPP) 2017, Marseille, France, 24-26 Avr 2017
5. Tests of Lepton Universality at LHCb, **K. A. De Bruyn**, The 14th International Workshop on Tau Lepton Physics (Tau2016), Beijing, China, 18-23 Sep 2016
6. BSM searches with tests of LFU and rare decays at LHCb, **O. Leroy**, In search of new paradigms, New York, United States, 11-13 Oct 2017

2016

1. Heavy Flavor Rare Decays, **J. Cogan**, 2016 Aspen Winter Conference on Particle Physics, Aspen, United States, 11-16 Jan 2016
2. Flavor Physics, **O. Leroy**, Lake Louise Winter Institute 2016, Lake Louise, Canada, 07-13 Feb 2016
3. DIRAC Data Management Framework, **A. Tsaregorodtsev**, International Symposium on Grids and Clouds 2016, Tapei, Taiwan, 13-18 Mar 2016
4. A Roadmap to Controlling Penguin Effects in  $\phi_d$  and  $\phi_s$ , **K. De Bruyn**, 16th International Conference on B-Physics at Frontier Machines, Beauty 2016, Marseille, France, 01-06 May 2016
5. EW and radiative penguin transitions from B-factories, **S. Akar**, 16th International Conference on B-Physics at Frontier Machines, Marseille, France, 2-6 May 2016
6. CP violation in B and charm decays at LHCb, **S. Akar**, 28th Rencontres de Blois on Particle Physics and Cosmology, Blois, France, 29 May - 2 Jun 2016
7. DIRAC Data Management System, **A. Tsaregorodtsev**, 7th International Conference "Distributed Computing and Grid- technologies in Science and Education" (GRID2016), Dubnia, Russia, 04-09 Jun 2016
8. Experimental prospects on time-dependent CP Violation and Mixing in  $B_{(s)}^0$  Meson decays, **O. Leroy**, Heavy Flavour 2016 - Quo Vadis?, Islay, United Kingdom, 11-15 Jul 2016
9. Potential for CPV measurements in the HL-LHC period, **S. Akar**, Heavy Flavour physics at HL-LHC, Genève, Switzerland, 31 Aug 2016
10. Tests of Lepton Universality at LHCb and LFV in Tau Decays: Results and Prospects at the LHC, **K. De Bruyn**, The 14th International Workshop on Tau Lepton Physics (Tau2016), Beijing, China, 18-23 Sep 2016
11. WG3 Summary-Rare B,D,K Decays, **J. Serrano**, 9th International Workshop on the CKM Unitarity Triangle (CKM2016), Mumbai, India, 28 Nov - 2 Dec 2016
12. Rare B decays with taus, **J. Serrano**, Workshop 'LFV/LFUV, why and How?', Paris, France, 7-9 Nov 2016

2015

1. Flavour Physics, **J. Serrano**, Journée de la Société Française de Physique sur le futur de la Physique des Particules, Paris, France, 23 Jan 2015
2. Federating LHCb datasets using the DIRAC File catalog, C. Haen, P. Charpentier, M. Frank, **A. Tsaregorodtsev**, 21st Conference in High Energy and Nuclear Physics 2015, Okinawa, Japan, 13-17 Apr 2015
3. Mixing-induced CP violation in  $B_s$  decays, **S. Akar**, Flavor Physics & CP violation 2015" (FPCP 2015), Nagoya, Japan, 25-29 Mai 2015

4. Rare beauty and charm decays at LHCb, **A. Morda**, 27th Rencontres de Blois on Particle Physics and Cosmology, Blois, France, 31 May - 5 Jun 2015
5. Rare Decays in Search for BSM physics at LHCb, **J. Serrano**, LISHEP 2015, Manaus, Brazil, 2-9 Aou 2015
6. Heavy flavour physics at LHCb: Run I highlights and future prospects, **S. Akar**, XXIIIe Congrès Général de la Société Française de Physique, Strasbourg, France, 24-28 Aou 2015
7. TWEPP 2015 - Topical Workshop on Electronics for Particle Physics, F. Rethoré, TWEPP 2015 - Topical Workshop on Electronics for Particle Physics, Lisbonne, Portugal, 28 Sep - 03 Oct 2015
8. Status of the DIRAC Project: overview and recent developments, **A. Tsaregorodtsev**, XXV International Symposium on Nuclear Electronics and Computing NEC'2015, Budva, Becici, Montenegro, 28 Sep 2015 2 Oct 2015
9. The PCIe-based readout system for the LHCb experiment, **F. Rethore**, Topical Workshop on Electronics for Particle Physics, Lisbon, Portugal, 28 Sep - 2 Oct 2015
10. Experimental overview of measurements of mixing phases and CPV results with  $B \rightarrow J/\psi X$  decays, **S. Akar**, Implications of LHCb measurements and future prospects, Genève, Switzerland, 3-5 Nov 2015

2014

1. Rare  $B_{(s)}^0$  dileptonic decays at LHCb, **A. Mordá**, 28ème Rencontres de Physique de La Vallée d'Aoste, La Thuile, Italy, 23 Feb - 1 Mar 2014
2. Latest Results on Rare Decays from LHCb, **J. Serrano**, 28ème Rencontres de Physique de La Vallée d'Aoste, La Thuile, Italy, 23 Feb - 1 Mar 2014
3. On the possibility of measuring  $B(B_s \rightarrow \tau\tau)$ , **A. Morda**, Flavor of new physics  $b \rightarrow s$  transitions, Paris, France, 2-3 Jun 2014
4. Rare dileptonic  $B_{(s)}^0 \rightarrow \ell\bar{\ell}$  decays at LHCb, **A. Morda**, 3ème workshop OCEVU, Montpellier, France, 16-17 Jun 2014
5. Branching ratio measurement of  $B_{(s)}^0 \rightarrow \mu\mu$  decay at LHCb, **A. Morda**, The 2014 European School of High-Energy Physics, Amsterdam, Netherlands, 18 Jun - 1 Jul 2014
6. LHC Searches in Rare Heavy-Flavor Decays, **G. Mancinelli**, Astroparticle Physics - A Joint TeVPA/ IDM Conference, Amsterdam, Netherlands, 23-28 Jun 2014
7. On the possibility of measuring  $\mathcal{B}(B_s \rightarrow \tau\tau)$  at LHCb, **A. Morda**, Flavor of new physics  $b \rightarrow s$  transitions, Paris, France, 2-3 Jul 2014
8. The LHCb Upgrade, **S. Akar**, 11th International Conference on Hyperons, Charm and Beauty Hadrons, Birmingham, United Kingdom, 21-26 Jul 2014



9. *CP* violating phase  $\phi_s$  measurement and penguin pollution in  $\phi_s$  at LHCb, **W. Kanso**, 8th International Workshop on the CKM Unitarity Triangle, Univ. Tech., Austria, 08-12 Sep 2014
10. LHCb status and prospects, **O. Leroy**, Miami 2014 : A topical conference on elementary particles, astrophysics, and cosmology, Fort Lauderdale, United States, 17-23 Dec 2014

2013

1. Search for the very rare decays  $B_{s/d} \rightarrow \mu^+\mu^-$  at LHCb, **J. Serrano**, Third Workshop on Flavour Physics in the LHC Era: Theoretical and Experimental Views, Valencia, Spain, 4-6 Feb 2013
2. The measurement of the *CP*-violating phase,  $\phi_s$ , and the penguin contributions in  $B_s^0 \rightarrow J/\psi\phi$  at LHCb, **W. Kanso**, LHC France 2013, Annecy, France, 2-6 Apr 2013
3. Experimental report on  $B_{(s)}^0 \rightarrow \mu^+\mu^-$ , **M. Perrin-Terrin**, LHC France 2013, Annecy, France, 2-6 Apr 2013
4. Measurement of *CP* violation in  $B_s^0 \rightarrow J/\psi\phi$  at LHCb, **O. Leroy**, LHC France 2013: French Meeting on High Energy Physics at the LHC, Annecy, France, 2-6 Apr 2013
5. The LHCb Upgrade, **R. Le Gac**, Flavor Physics & *CP* Violation, Buzios, Brazil, 19-24 May 2013
6. Rare  $B_{s,d}^0$  dileptonic decay, **A. Mordà**, 2nd Labex Workshop OCEVU 2013, Toulouse, France, 11-13 Jun 2013
7. Rare Decays of Heavy Mesons, **G. Mancinelli**, 26th International Symposium on Lepton Photon Interactions at High Energies, San Francisco, United States, 24-29 Jun 2013
8. Saveurs lourdes et recherche de nouvelle physique avec LHCb, **J. Serrano**, 22ème Congrès Général de la SFP, Marseille, France, 1-5 Jul 2013
9. The measurement of the *CP*-violating phase,  $\phi_s$ , and the penguin contributions in  $B_s^0 \rightarrow J/\psi\phi$  at LHCb, **W. Kanso**, 22ème Congrès général de la Société Française de Physique SFP, Marseille, France, 1-5 Jul 2013
10. The LHCb upgrade, **J. Cogan**, EPS-HEP 2013 European Physical Society Conference on High Energy Physics, Stockholm, Sweden, 18-24 Jul 2013
11. Observation of  $B_s \rightarrow \mu^+\mu^-$  at the LHC: LHCb results, **J. Serrano**, CERN-LHC Seminar: Observation of the  $B_s \rightarrow \mu^+\mu^-$  Rare Decay at the LHC, Cern, Switzerland, 6 Aug 2013
12. Rare decays of beauty and charm hadrons at LHCb, **J. Serrano**, 9th Rencontres du Vietnam: Windows on the Universe, Quy Nhon, Vietnam, 11-17 Aug 2013

13. Measurement of  $\phi_s$  at LHCb, **O. Leroy**, Meeting of the American Physical Society Division of Particles and Fields, Santa Cruz, United States, 13-17 Aug 2013
14. Searches for Rare Decays at LHCb, **M. Perrin-Terrin**, Meeting of the American Physical Society Division of Particles and Fields, Santa Cruz, United States, 13-17 Aug 2013
15. Evaluation of 400m, 5Gbit Versatile Link lengths over OM3 and OM4 fibres for the LHCb upgrade, R. Schwemme, J.-P. Cachemiche, N. Neufeld, C. Soos, J.Troska, Twepp 2013, Perugia, Italy, 23-27 Sep 2013
16. Powering large FPGAs - ALTERA, J.P. Cachemiche, R. Réthoré, TWEPP 2013, Perugia, Italy, 23-27 Sep 2013
17. Update on the ATCA/AMC readout cards for LHCb, C. Abellan, **J.-P. Cachemiche**, P.-Y. Duval, F. Hachon, R. Le Gac, F. Réthoré, Topical Workshop on Electronics for Particle Physics, Perugia, Italy, 23-27 Sep 2013

2012

1.  $\phi_s$  and  $B_s$  mixing at LHCb, **E. Maurice**, 8th Meeting on B Physics, Genoa, Italy, 6-8 Feb 2012
2. Study of CPV in  $b$  and Charm Systems at LHCb, **E. Maurice**, 26ème Rencontres de Physique de La Vallée d'Aoste, La Thuile, Italy, 26 Feb - 3 Mar 2012
3. The LHCb Upgrade, **R. Le Gac**, XX International Workshop on Deep-Inelastic Scattering and Related Subjects, Bonn, Germany, 26-30 Mar 2012
4. Mixing and CP violation, **O. Leroy**, Physics at LHC 2012, Vancouver, Canada, 4-9 Jun 2012
5. Rare decays at LHCb, **C. Adrover Pacheco**, Physics at LHC 2012, Vancouver, Canada, 4-9 Jun 2012
6.  $B_{(s)}^0 \rightarrow \mu^+ \mu^-$  searches at LHCb, **C. Adrover Pacheco**, Physics at LHC 2012, Vancouver, Canada, 4-9 Jun 2012
7. Recent results from LHCb, **J. Serrano**, Lattice 2012 - The 30th International Symposium on Lattice Field Theory, Cairns, Australia, 24-29 Jun 2012
8. Searches for very rare decays to purely leptonic final states at LHCb, **M. Perrin-Terrin**, 36th International Conference on High Energy Physics, Melbourne, Australia, 4-11 Jul 2012
9. Rare Decays with LHCb, **G. Mancinelli**, International conference : Beyond The Standard Model of Particle Physics, Quy Nhon, Vietnam, 15-21 Jul 2012
10. xTCA developments for the LHCb Readout, J. P. Cachemiche, P. Y. Duval, F. Hachon, R. Le Gac, F. Réthoré, Topical Workshop on Electronics for Particle Physics 2012, Oxford, United Kingdom, 17-21 Sep 2012

11. Recent developments for the Upgrade of the LHCb readout system, J. P. Cachemiche, P. Y. Duval, F. Hachon, R. Le Gac, F. Réthoré, Topical Workshop on Electronics for Particle Physics, Oxford, United Kingdom, 17-21 Sep 2012
12. LHCb status, **J. Cogan**, LHC days in Split 2012, Split, Croatia, 1-6 Oct 2012

2011

1. Prospects for CP violation in  $B_s^0 \rightarrow J/\psi\phi$  from first LHCb data, **O. Leroy**, 25ème Rencontres de Physique de La Vallée d'Aoste, La Thuile, Italy, 27 Feb - 5 Mar 2011
2. Quarkonia studies in LHCb:  $\Upsilon(1S)$ , Double  $J/\Psi$ ,  $\Psi(2S)$ ,  $\chi_c$ , **J. Cogan**, 13th International Conference on B-Physics at Hadron Machines, Amsterdam, Netherlands, 4-8 Apr 2011
3.  $b \rightarrow \mu^+\mu^-$  and  $b \rightarrow s\mu^+\mu^-$  at LHC, **G. Mancinelli**, Flavor Physics and CP Violation 2011, Maale Hachamisha, Israel, 23-27 May 2011
4. Search for  $B_s^0 \rightarrow \mu^+\mu^-$  and  $B_d^0 \rightarrow \mu^+\mu^-$ , **M. Perrin-Terrin**, Physics at LHC 2011, Perugia, Italy, 6-11 Jun 2011
5. Search for the rare decays  $B_{(s)}^0 \rightarrow \mu^+\mu^-$  at LHCb, **J. Serrano**, 2011 Europhysics Conference on High Energy Physics, Grenoble, France, 21-27 Jul 2011

2010

1. Search for New Physics with Rare Heavy Flavour Decays at LHCb, **G. Mancinelli**, 35th International Conference on High Energy Physics, Paris, France, 22-28 Jul 2010
2. LHCb prospects for full energy and beyond (incl. upgrades), **R. Le Gac**, Hadron Collider Physics Symposium 2010, Toronto, Canada, 23-27 Aug 2010
3. Operation and Performance of the LHCb experiment, **F. Alessio**, Workshop on Discovery Physics at the LHC, Mpumalanga, South Africa, 5-10 Dec 2010
4. Prospects for CP violation in  $B_s^0 \rightarrow J/\psi\phi$  from first LHCb data, **O. Leroy**, Symposium on Prospects in the Physics of Discrete Symmetries, Rome, Italy, 6-11 Dec 2010

## rapport

2017

1. Upgrade trigger: Biannual performance update, R. Aaij, J. Albrecht, B. Couturier, S. Esen, M. De Cian, J. A. De Vries, A. Dziurda, C. Fitzpatrick, M. Fontana, L. Grillo, C. Hasse, C. R. Jones, R. Le Gac, R. Matev, N. Neufeld, T. Nikodem, F. Polci, L. Del Buono, R. Quagliani, R. Schwemmer, P. Seyfert, S. Stahl, T. Szumlak, M. A. Vesterinen, J. Wanczyk, . Williams, H. Yin, E. A. Zacharjusz, CERN-LHCb-PUB-2017-005, LHCb-PUB-2017-005

2. Search for the decays  $B_s^0 \rightarrow t^+t$  and  $B^0 \rightarrow t^+t$ , J. Cogan, K. De Bruyn, G. Mancinelli, J. Serrano, LHCb- ANA-2017-007
  
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2. Tagged time-dependent analysis of  $B_s^0 \rightarrow J/\psi K^+ K$  and  $B_s^0 \rightarrow J/\psi \pi^+ \pi$  decays with  $1.0 \text{ fb}^{-1}$ , R. Aadj, Y. Amhis, M. Calvi, P. Clarke, G. Cowan, R. Currie, F. Dordei, F. Dupertuis, D. van Eijk, D. Ferguson, M. Grabalosa, S. Hansmann-Menzemer, W. Hulsbergen, G. Krocker, J. van Leerdam, O. Leroy, C. Linn, E. Maurice, T. Nikodem, D. Martinez Santos, F. Muheim, M. Needham, G. Raven, S. Stone, U. Uwer, S. Vecchi, Y. Xie, L. Zhang ,

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5. LHCb PID Upgrade Technical Design Report, LHCb Collaboration, CERN-LHCC-2013-022, LHCb-TDR-014
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3. Search for the rare decays  $B_s^0 \rightarrow \mu^+ \mu^-$  and  $B^0 \rightarrow \mu^+ \mu^-$  with  $1 \text{ fb}^{-1}$  of 2012 data, C. Adrover, J. Albrecht, F. Archilli, M.-O. Bettler, X. Cid Vidal, F. Dettori, C. Elsasser, G. Lanfranchi, G. Mancinelli, D. Martinez Santos, A. Mordà, S. Oggero, M. Palutan, A. Pellegrino, M. Perrin-Terrin, M. Rama, A. Sarti, M. Schlupp, J. Serrano, B. Sciascia, F. Soomro, S. Tolk, A. Ustyuzhanin, R. Vazquez Gomez, CERN-LHCb-ANA-081
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