

PERSONAL INFORMATION

**Lucian Nicolae Cojocariu** Ciocarliei 6B, 077125, Magurele, Ilfov (Romania) Skype

Sex Male | Date of birth 06/12/1986 | Nationality romanian

POSITION **Technology Development Engineer**

WORK EXPERIENCE

2018–present

Technology Development Engineer

Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering
Reactorului 30, 077125 Magurele (Romania)
<http://www.nipne.ro/dpp/Collab/LHCb/>

Designing and implementing electronic circuits with application in high energy physics detectors at LHCb, particularly to RICH-LHCb detector Upgrade.

Business or sector R&D

2017–2018

Post-DOC Researcher

Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering
Reactorului 30, 077125 Magurele (Romania)
<http://www.nipne.ro/dpp/Collab/LHCb/>

Designing and implementing electronic circuits with application in high energy physics detectors at RICH-LHCb detector Upgrade.

Business or sector R&D

2013–2017

Research Assistant

Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering
Reactorului 30, 077125 Magurele (Romania)
www.nipne.ro

Designing and implementing test methods as well as test benches for evaluating the radiation hardness tolerance at ionising radiation of the semiconductor devices with application in high energy physics detectors at LHC.

Business or sector R&D

2008–2013

Research Assistant

Stefan cel Mare University of Suceava
Universitatii 13, 720229 Suceava (Romania)
www.usv.ro

Printed circuits boards' prototyping and electronic circuits assembling. Designing and implementing Visible Light Communication Systems (VLC). Study on healthcare systems and applications. Study on low frequency RFID systems.

Business or sector Education

EDUCATION AND TRAINING

- 2012–Present** **PhD. student in Electronics Engineering and Telecommunication**
Stefan cel Mare University of Suceava
Universitatii 13, Suceava Suceava (Romania)
www.usv.ro
Testing and qualifying the radiation hardness of semiconductor devices with application in Large Hadron Collider (LHC) experiments.
- 09/2012** **Practical training stage**
Laboratoire d'Ingénierie des Systèmes de Versailles from Versailles University
Velizy, 78140 Versailles (France)
www.lisv.uvsq.fr
Designing and implementing the adaptive gain unit for the electrical signal generated by PIN photodiode. The photodetector device was part of a Visible Light communication system (VLC) with applicability in the Intelligent Transport (IT) infrastructure.
- 2010–2013** **MSc. degree in Computer and Communication Networks**
Faculty of Electrical Engineering and Computer Science
Universitatii 13, 720229 Suceava (Romania)
www.eed.usv.ro/fiesc/
Fundamentals of computer and communications networks, Wireless systems for communications, Data management and analysis, Computer networks programming.
- 07/2011–09/2011** **CERN Summer Student Programme**
European Organization for Nuclear Research (CERN), Geneva (Switzerland)
<http://home.cern/>
Implementing the data acquisition system for online monitoring the electrical parameters for a prototype chip. Into device were embedded several version of transistors layout. During tests the dice was irradiated with X-Ray and each transistor on it was evaluated based on electrical parameters recorded.
- 2007–2011** **B.S. in Economics Engineering in Electrical, Electronics and Energetics**
Faculty of Electrical Engineering and Computer Science
Universitatii 13, 720229 Suceava (Romania)
www.eed.usv.ro/fiesc/
General disciplines:
-Physics, English, Mathematical analysis, Special mathematics;
Technical disciplines:
-Electronic components and devices, Analysis and synthesis of circuits, Electrical measurements sensors and traducers, Electrotechnical basis, Theory of electrotechnical materials, Production, transmission and distribution of electricity, Static converters, Electrical equipment, Electrical driving system, Industrial robots.
Other disciplines:
Economics basis, Accounting, Statistics, Marketing, Management.
- 02/2009–06/2009** **Europas Mobilitate Certificat**
Universitu of KaHo Sint-Lievent Gent
Gebroeders De Smetstraat 1, 9000 Gent (Belgium)
www.kuleuven.be/english
Study of low frequency RFID systems.
- 2006–2010** **B.S. in Applied Electronics**
Faculty of Electrical Engineering and Computer Science
Universitatii 13, 720229 Suceava (Romania)
www.eed.usv.ro/fiesc/
General disciplines:
-Physics, English, Mathematical analysis, Special mathematics;

Technical disciplines:

-Electronic devices, Analysis and synthesis of circuits, Integrated digital circuits, Integrated analog circuits, Electrical measurements sensor and traducer, Optoelectronics, Domestics, Microcontrollers.

2002–2006

High school diploma

Alexandru Ioan Cuza Technical Collage
Calea Unirii 47, Suceava (Romania)
www.ctalicuza.ro

Technic Disciplines:

-Analogic and digital electronics, Electronic and electric measurements, Technical drawing;

General Disciplines:

-Mathematics, Physics, English, History, Geography;

PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	B2	B2	B1
French	B1	B2	A1	A1	A2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

The ability of exposing, in a logical way, the data of technical problem and possible solutions regarding it. The ability of elaborating diagrams and other graphic elements that can help people understand a certain topic. The predisposition to initiate and support conversations on different themes.

Organisational / managerial skills

Experience in managing different activities at every stage. Attention to details regarding the way in which a research – development project is ongoing. Good organizational skills gained by organizing contents on electronics at county level, respectively being involved in research activities that take place in laboratories either in the country or abroad.

Job-related skills

Team spirit and competitiveness earned as result of involvement in research activities carried in national or abroad laboratories. The ability to sustain the work for achieving on time a project deadline.

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

[Digital competences - Self-assessment grid](#)

Driving licence

B

Annex

List of publications

List of publications

- [1] L. N. Cojocariu, V. M. Placinta, "Ion beam irradiation effects in KINTEX-7 FPGA resources", Romanian Journal of Physics (RJP), accepted for publication in May 2018. Available [online](#) (last accessed May 23, 2018): https://www.nipne.ro/rjp/accpaps/Cojocariu_3DBADE.pdf
- [2] V. M. Placinta, L. N. Cojocariu, "Radiation Hardness Studies and Evaluation of SRAM-Based FPGAs for High Energy Physics Experiments", PoS TWEPP-17, Santa Cruz, USA, 2018.
- [3] V. M. Placinta, L. N. Cojocariu, and C. Ravariu, "Test bench design for radiation tolerance of two ASIC's", *Romanian Journal of Physics (RJP)*, 62, 903, 2017.
- [4] V. M. Placinta, L. N. Cojocariu, and C. Ravariu, "Evaluating the Switching Mode Power Supplies used in Radiation Hardness Tests of Integrated Circuits", *International Semiconductor Conference (CAS)*, Sinaia, Romania, 2017.
- [5] M. K. Baszczyk,, L. Cojocariu, et al., "Test of the photon detection system for the LHCb RICH Upgrade in a charged particle beam", *Journal of Instrumentation*, vol. 12, pp. P01012-P01012, 2017.
- [6] L. N. Cojocariu, V. M. Placinta, and L. Dumitru, "Monitoring System for Testing the Radiation Hardness of a KINTEX-7 FPGA", *9th International Physics Conference of the Balkan Physical Union (Bpu-9)*, vol. 1722, p. 140009, 2016.
- [7] M. Prelipceanu, L. Cojocariu, A. Graur, and S. Schrader, "Analysis of thermally stimulated processes in new phenanthroline derivatives suitable for optoelectronic devices", *Journal of Physics: Conference Series*, vol. 585, p. 012011, 2015.
- [8] M. Prelipceanu, L. N. Cojocariu, and A. Graur, "Surface investigations of vacuum Teflon thin films deposited on different materials suitable for medical applications and optoelectronics", *IEEE Xplore, E-Health and Bioengineering Conference (EHB)*, pp. 1-4, 2013.
- [9] L. N. Cojocariu, M. Dimian, and M. Prelipceanu, "Developing a wireless electrocardiography device for mobile and at-home healthcare applications", *IEEE Xplore, E-Health and Bioengineering Conference (EHB)*, pp. 1-4, 2013.
- [10] M. Dimian, L. N. Cojocariu, and M. F. Ursuleanu, "Developing Mobile Studio Laboratories for electronics disciplines in technical educational programs", *13th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM)* pp. 1307-1313, 2012.
- [11] L. N. Cojocariu, O. Manu, "Design and development of a RFID reader with carrier frequency of 125 KHz", *DOCT-US*, vol. 3, 2011.
- [12] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "First observation of forward $Z \rightarrow b\bar{b}$ over-bar production in pp collisions at root s=8 TeV", *Physics Letters B*, Article vol. 776, pp. 430-439, Jan 2018.
- [13] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "First observation of $B^+ \rightarrow D^-s(+)$ K^+K^- decays and a search for $B^+ \rightarrow D^-s(+)$ phi decays", *Journal of High Energy Physics*, Article no. 1, p. 22, Jan 2018, Art. no. 131.
- [14] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Search for excited $B^-c(+)$ states", *Journal of High Energy Physics*, Article no. 1, p. 18, Jan 2018, Art. no. 138.
- [15] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Search for Dark Photons Produced in 13 TeV pp Collisions", *Physical Review Letters*, Article vol. 120, no. 6, p. 11, Feb 2018, Art. no. 061801.
- [16] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Measurement of CP observables in $B^- \rightarrow D^-(*)K^+ \rightarrow D^- \pi^+$ and $B^- \rightarrow D^-(*)\pi^- \rightarrow D^-(*)\pi^+$ decays", *Physics Letters B*, Article vol. 777, pp. 16-30, Feb 2018.
- [17] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Search for weakly decaying b-flavored pentaquarks", *Physical Review D*, Article vol. 97, no. 3, p. 11, Feb 2018, Art. no. 032010.
- [18] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Measurement of branching fractions of charmless four-body $\Lambda(0)b$ and $\Xi(0)b$ decays", *Journal of High Energy Physics*, Article no. 2, p. 25, Feb 2018, Art. no. 098.
- [19] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Updated determination of D^-D^0 over-bar mixing and CP violation parameters with $D^- \rightarrow K^-\pi^+$ decays", *Physical Review D*, Article vol. 97, no. 3, p. 11, Feb 2018, Art. no. 031101.
- [20] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Measurements of the branching fractions of $\Lambda(+)c \rightarrow p\pi^-\pi^+$, $\Lambda(+)c \rightarrow pK^-\pi^+$, and $\Lambda(+)c \rightarrow p\pi^-K^-(+)$ ", *Journal of High Energy Physics*, Article no. 3, p. 23, Mar 2018, Art. no. 043.
- [21] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Measurement of CP asymmetry in $B^-s(0) \rightarrow (DsK^+/-K^-/-) decays$ ", *Journal of High Energy Physics*, Article no. 3, p. 28, Mar 2018, Art. no. 059.
- [22] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Search for the lepton-flavour violating decays $B^-s(0) \rightarrow e^+\mu^-$ ", *Journal of High Energy Physics*, Article no. 3, p. 20, Mar 2018, Art. no. 078.
- [23] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Measurement of the Ratio of Branching Fractions $B(B^-c(+)) \rightarrow J/\psi\tau^+(\nu\tau^+)$ / $B(B^-c(+)) \rightarrow J/\psi\mu^+(\nu\mu^+)$ ", *Physical Review Letters*, Article vol. 120, no. 12, p. 10, Mar 2018, Art. no. 121801.
- [24] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "First measurement of the CP-violating phase $\phi_{dd}(s)$ in $B^-s(0) \rightarrow (K^+\pi^-(+))(K^-\pi^+(+))$ decays", *Journal of High Energy Physics*, Article no. 3, p. 32, Mar 2018, Art. no. 140.
- [25] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Measurements of prompt charm production cross-sections in pp collisions at root s = 13 TeV (vol 03, 159, 2016)", *Journal of High Energy Physics*, Correction no. 5, p. 29, May 2017, Art. no. 074.
- [26] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "New algorithms for identifying the flavour of B-0 mesons using pions and protons", *European Physical Journal C*, Article vol. 77, no. 4, p. 15, Apr 2017, Art. no. 238.
- [27] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Observation of the decay $B^-s(0) \rightarrow \eta(c)\phi$ and evidence for $B^-s(0) \rightarrow \eta(c)\pi^+\pi^-$ ", *Journal of High Energy Physics*, Article no. 7, p. 33, Jul 2017, Art. no. 021.
- [28] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Measurement of CP asymmetry in $D^- \rightarrow K^-K^+$ decays", *Physics Letters B*, Article vol. 767, pp. 177-187, Apr 2017.
- [29] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Measurement of forward $t(t)\overline{t}$, $W + b\bar{b}$ and $W + c\bar{c}$ production in ppc collisions at root s=8 TeV", *Physics Letters B*, Article vol. 767, pp. 110-120, Apr 2017.
- [30] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Measurement of CP asymmetries in $D^- \rightarrow \eta(c)\pi^+$ and $D^- \rightarrow \eta(c)\pi^-$ decays", *Physics Letters B*, Article vol. 771, pp. 21-30, Aug 2017.
- [31] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Observation of the $\Xi^-(b) \rightarrow J/\psi\Lambda K^-$ decay", *Physics Letters B*, Article vol. 772, pp. 265-273, Sep 2017.
- [32] R. Aaij,, L. Cojocariu, *LHCb Collaboration*, "Evidence for the two-body charmless baryonic decay $B^+ \rightarrow p(\Lambda b)\overline{b}$ ", *Journal of High Energy Physics*, Article vol. 773, pp. 1-18, Oct 2017.

- [33] Energy Physics, Article no. 4, p. 18, Apr 2017, Art. no. 162.
- [33] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Amplitude analysis of $B^+ \rightarrow J/\psi \phi K^+$ decays", *Physical Review D*, Article vol. 95, no. 1, p. 28, Jan 2017, Art. no. 012002.
- [34] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of $J/\psi \phi$ Structures Consistent with Exotic States from Amplitude Analysis of $B^+ \rightarrow J/\psi \phi K^+$ Decays", *Physical Review Letters*, Article vol. 118, no. 2, p. 10, Jan 2017, Art. no. 022003.
- [35] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for the suppressed decays $B^+ \rightarrow K^+ K^+ \pi^-$ and $B^+ \rightarrow \pi^+ \pi^- \pi^-$ ", *Physics Letters B*, Article vol. 765, pp. 307-316, Feb 2017.
- [36] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurements of the S-wave fraction in $B^- \rightarrow K^+ \pi^- \mu^+ \mu^-$ decays and the $B^- \rightarrow K^*(892)(0) \mu^+ \mu^-$ differential branching fraction (vol 11, 047, 2016)", *Journal of High Energy Physics*, Correction no. 4, p. 8, Apr 2017, Art. no. 142.
- [37] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of $\eta(c)(2S) \rightarrow p(p)\bar{p}$ and search for $X(3872) \rightarrow p(p)\bar{p}$ decays", *Physics Letters B*, Article vol. 769, pp. 305-313, Jun 2017.
- [38] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "First Experimental Study of Photon Polarization in Radiative $B_s(0)$ Decays", *Physical Review Letters*, Article vol. 118, no. 2, p. 9, Jan 2017, Art. no. 021801.
- [39] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the decay $B_s(0) \rightarrow \phi \pi^+ \pi^-$ and evidence for $B^- \rightarrow \phi \pi^+ \pi^-$ ", *Physical Review D*, Article vol. 95, no. 1, p. 15, Jan 2017, Art. no. 012006.
- [40] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the b-Quark Production Cross Section in 7 and 13 TeV pp Collisions", *Physical Review Letters*, Article vol. 118, no. 5, p. 11, Feb 2017, Art. no. 052002.
- [41] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the Decay $\Xi(-)b \rightarrow pK(-)K(-)$ ", *Physical Review Letters*, Article vol. 118, no. 7, p. 11, Feb 2017, Art. no. 071801.
- [42] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the Annihilation Decay Mode $B^- \rightarrow K^+ K^-$ ", *Physical Review Letters*, Article vol. 118, no. 8, p. 9, Feb 2017, Art. no. 081801.
- [43] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of $B_c(+) \rightarrow J/\psi D^-(*) K^-(*)$ decays", *Physical Review D*, Article vol. 95, no. 3, p. 12, Feb 2017, Art. no. 032005.
- [44] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of $B_c(+) \rightarrow (D\bar{K}) K^-$ Decays", *Physical Review Letters*, Article vol. 118, no. 11, p. 9, Mar 2017, Art. no. 111803.
- [45] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the $B^- \pi^-$ production asymmetry and the CP asymmetry in $B^- \pi^- \rightarrow J/\psi K^- \pi^-$ decays", *Physical Review D*, Article vol. 95, no. 5, p. 13, Mar 2017, Art. no. 052005.
- [46] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurements of charm mixing and CP violation using $D^- \rightarrow K^- \pi^- \pi^+$ decays", *Physical Review D*, Article vol. 95, no. 5, p. 14, Mar 2017, Art. no. 052004.
- [47] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of matter-antimatter differences in beauty baryon decays", *Nature Physics*, Article vol. 13, no. 4, pp. 391-+, Apr 2017.
- [48] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the suppressed decay $\Lambda(0)b \rightarrow p \pi^- \mu^+ \mu^-$ ", *Journal of High Energy Physics*, Article no. 4, p. 16, Apr 2017, Art. no. 029.
- [49] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for massive long-lived particles decaying semileptonically in the LHCb detector", *European Physical Journal C*, Article vol. 77, no. 4, p. 16, Apr 2017, Art. no. 224.
- [50] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for long-lived scalar particles in $B^- \rightarrow K^+ \chi(\mu^+ \mu^-)$ decays", *Physical Review D*, Article vol. 95, no. 7, p. 9, Apr 2017, Art. no. 071101.
- [51] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of Five New Narrow $\Omega(0)c$ States Decaying to $\Xi^- K^+(c)$ ", *Physical Review Letters*, Article vol. 118, no. 18, p. 10, May 2017, Art. no. 182001.
- [52] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of the $D(0)p$ amplitude in $\Lambda(0)b \rightarrow D(0)p \pi^-$ decays", *Journal of High Energy Physics*, Article no. 5, p. 43, May 2017, Art. no. 030.
- [53] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of J/ψ Production in Jets", *Physical Review Letters*, Article vol. 118, no. 19, p. 11, May 2017, Art. no. 192001.
- [54] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the $B_s(0) \rightarrow \mu^+ \mu^-$ Branching Fraction and Effective Lifetime and Search for $B^- \rightarrow \mu^+ \mu^-$ Decays", *Physical Review Letters*, Article vol. 118, no. 19, p. 11, May 2017, Art. no. 191801.
- [55] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for the $B_s(0) \rightarrow \eta' \phi$ decay", *Journal of High Energy Physics*, Article no. 5, p. 18, May 2017, Art. no. 158.
- [56] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the J/ψ pair production cross-section in pp collisions at root s=13TeV", *Journal of High Energy Physics*, Article no. 6, p. 38, Jun 2017, Art. no. 047.
- [57] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for CP violation in the phase space of $D^- \rightarrow \pi^+ \pi^- \pi^+ \pi^-$ decays", *Physics Letters B*, Article vol. 769, pp. 345-356, Jun 2017.
- [58] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for the Decays $B_s(0) \rightarrow \tau^+ \tau^-$ and $B^- \rightarrow \tau^+ \tau^-$ ", *Physical Review Letters*, Article vol. 118, no. 25, p. 10, Jun 2017, Art. no. 251802.
- [59] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the decay $\Lambda(0)b \rightarrow p K^- \mu^+ \mu^-$ and a search for CP violation", *Journal of High Energy Physics*, Article no. 6, p. 17, Jun 2017, Art. no. 108.
- [60] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the CP Violation Parameter A(Gamma) in $D^- \rightarrow K^+ K^-$ and $D^- \rightarrow \pi^+ \pi^-$ Decays", *Physical Review Letters*, Article vol. 118, no. 26, p. 9, Jun 2017, Art. no. 261803.
- [61] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the $B^- \rightarrow D^* K^- \pi^+$ decay", *Physical Review D*, Article vol. 96, no. 1, p. 10, Jul 2017, Art. no. 011101.
- [62] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "First Observation of a Baryonic $B_s(0)$ Decay", *Physical Review Letters*, Article vol. 119, no. 4, p. 10, Jul 2017, Art. no. 041802.
- [63] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the Decays $\Lambda(0)b \rightarrow \chi(c1)pK^-$ and $\Lambda(0)b \rightarrow \chi(c2)pK^-$ ", *Physical Review Letters*, Article vol. 119, no. 6, p. 11, Aug 2017, Art. no. 062001.
- [64] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Resonances and CP violation in $B_s(0)$ and $(B^-) \bar{p} \bar{s}$ decays in the mass region above the $I=1/2$ center dot(1020)", *Journal of High Energy Physics*, Article no. 8, p. 28, Aug 2017, Art. no. 037.
- [65] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Test of lepton universality with $B^- \rightarrow K^*(0)l^+ l^-$ decays", *Journal of High Energy Physics*, Article no. 8, p. 31, Aug 2017, Art. no. 055.
- [66] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of $B_s(0)$ and $D_s(-)$ Meson Lifetimes", *Physical Review Letters*, Article vol. 119, no. 10, p. 10, Sep 2017, Art. no. 101801.
- [67] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of charmonium production in b-hadron decays and first evidence for the decay $B_s(0) \rightarrow \phi \phi \phi$ ", *European Physical Journal C*, Article vol. 77, no. 9, p. 18, Sep 2017, Art. no. 609.
- [68] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of charmless baryonic decays $B_s(0) \rightarrow p(p)\bar{p}$ plus h^- ", *Physical Review Letters*

- D, Article vol. 96, no. 5, p. 10, Sep 2017, Art. no. 051103.
- [69] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Improved limit on the branching fraction of the rare decay $K\text{-}S(0) \rightarrow \mu(+)\mu(-)$ ", *European Physical Journal C*, Article vol. 77, no. 10, p. 12, Oct 2017, Art. no. 678.
- [70] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Updated branching fraction measurements of $B\text{-}(s)(0) \rightarrow K(S)(0)h(+)\bar{h}(-)$ decays", *Journal of High Energy Physics*, Article no. 11, p. 42, Nov 2017, Art. no. 027.
- [71] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of $B\text{-}0$, $B\text{-}s(0)$, $B\text{(+)}\bar{}$ and $\Lambda(0)\bar{b}$ production asymmetries in 7 and 8 TeV proton-proton collisions", *Physics Letters B*, Article vol. 774, pp. 139-158, Nov 2017.
- [72] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Updated search for long-lived particles decaying to jet pairs", *European Physical Journal C*, Article vol. 77, no. 12, p. 14, Nov 2017, Art. no. 812.
- [73] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of $B^+ \rightarrow J/\psi 3\pi(+)2\pi(-)$ and $B^+ \rightarrow \psi(2S)\pi(+)2\pi(-)$ decays", *European Physical Journal C*, Article vol. 77, no. 2, p. 12, Feb 2017, Art. no. 72.
- [74] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for decays of neutral beauty mesons into four muons", *Journal of High Energy Physics*, Article no. 3, p. 19, Mar 2017, Art. no. 001.
- [75] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for the CP-violating strong decays $\eta \rightarrow \pi(+)2\pi(-)$ and $\eta' \rightarrow \pi(+)2\pi(-)$ ", *Physics Letters B*, Article vol. 764, pp. 233-240, Jan 2017.
- [76] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the phase difference between short- and long-distance amplitudes in the $B^+ \rightarrow K^+\mu(+)\mu(-)$ decay", *European Physical Journal C*, Article vol. 77, no. 3, pp. 1-15, Mar 2017, Art. no. 161.
- [77] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the Doubly Charmed Baryon $\Xi^{++}(cc)$ ", *Physical Review Letters*, Article vol. 119, no. 11, p. 10, Sep 2017, Art. no. 112001.
- [78] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of prompt D-0 meson production in pPb collisions at $\sqrt{s_{NN}}=5\text{ TeV}$ ", *Journal of High Energy Physics*, Article no. 10, p. 28, Oct 2017, Art. no. 090.
- [79] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of D-0 meson decays to $\pi(+)2\pi(-)$ final states", *Physical Review Letters*, Article vol. 119, no. 18, p. 10, Oct 2017, Art. no. 181805.
- [80] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of b(b)over-bar correlations in high energy proton-proton collisions", *Journal of High Energy Physics*, Article no. 11, p. 28, Nov 2017, Art. no. 030.
- [81] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Prompt and nonprompt J/ψ production and nuclear modification in pPb collisions at $\sqrt{s_{NN}}=8.16\text{ TeV}$ ", *Physics Letters B*, Article vol. 774, pp. 159-178, Nov 2017.
- [82] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of CP observables in $B\text{-}+/- \rightarrow DK^*(+/-)$ decays using two- and four-body D final states", *Journal of High Energy Physics*, Article no. 11, p. 27, Nov 2017, Art. no. 156.
- [83] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of CP violation in $B\text{-}0 \rightarrow J/\psi K\text{-}S(0)$ and $B\text{-}0 \rightarrow \psi(2S)K\text{-}S(0)$ decays", *Journal of High Energy Physics*, Article no. 11, p. 18, Nov 2017, Art. no. 170.
- [84] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "chi(c1) and chi(c2) Resonance Parameters with the Decays $\chi(c1,c2) \rightarrow J/\psi\mu(+)\mu(-)$ ", *Physical Review Letters*, Article vol. 119, no. 22, p. 9, Nov 2017, Art. no. 221801.
- [85] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "First Observation of the Rare Purely Baryonic Decay $\Lambda\text{-}B\text{-}0 \rightarrow \Lambda\text{-}B\text{-}0 \rightarrow \Lambda\text{-}B\text{-}0$ over-bar \$-\$", *Physical Review Letters*, Article vol. 119, no. 23, p. 10, Dec 2017, Art. no. 232001.
- [86] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the $B\text{-}+/-$ production cross-section in pp collisions at $\sqrt{s}=7$ and 13 TeV", *Journal of High Energy Physics*, Article no. 12, p. 25, Dec 2017, Art. no. 026.
- [87] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the shape of the $\Lambda(0)\bar{b}$ -> $\Lambda(+)c$ mu(-)nu over-bar mu differential decay rate", *Physical Review D*, Article vol. 96, no. 11, p. 15, Dec 2017, Art. no. 112005.
- [88] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the $(sic)(nS)$ polarizations in pp collisions at $\sqrt{s}=7$ and 8 TeV", *Journal of High Energy Physics*, Article no. 12, p. 60, Dec 2017, Art. no. 110.
- [89] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for Baryon-Number Violating $\Xi(0)\bar{b}$ Oscillations", *Physical Review Letters*, Article vol. 119, no. 18, p. 9, Nov 2017, Art. no. 181807.
- [90] H. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of forward J/ψ production cross-sections in pp collisions at $\sqrt{s}=13\text{ TeV}$ ", *Journal of High Energy Physics*, Correction no. 5, p. 17, May 2017, Art. no. 063.
- [91] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of $\Lambda(0)\bar{b} \rightarrow \psi(2S)p\bar{K}(-)$ and $\Lambda(0)\bar{b} \rightarrow J/\psi\pi(+)2\pi(-)$ decays and a measurement of the $A(\Lambda(0)\bar{b})$ baryon mass", *Journal of High Energy Physics*, Article no. 5, p. 22, May 2016, Art. no. 132.
- [92] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Production of associated Y and open charm hadrons in pp collisions at $\sqrt{s}=7$ and 8 TeV via double parton scattering", *Journal of High Energy Physics*, Article no. 7, p. 36, Jul 2016, Art. no. 052.
- [93] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of $\psi(2S)$ production and cold nuclear matter effects in pPb collisions at $\sqrt{s_{NN}}=5\text{ TeV}$ ", *Journal of High Energy Physics*, Article no. 3, p. 21, Mar 2016, Art. no. 133.
- [94] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observations of $\Lambda(0)\bar{b} \rightarrow \Lambda(+)2\pi(-)$ and $\Lambda(0)\bar{b} \rightarrow \Lambda(+)2\pi(-)$ decays and searches for other $\Lambda(0)\bar{b}$ and $\Xi(0)\bar{b}$ decays to Lambda h(+)-h(-) final states", *Journal of High Energy Physics*, Article no. 5, p. 22, May 2016, Art. no. 081.
- [95] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for $B\text{-}c(+) \rightarrow p\bar{p}$ over-bar pi(+) final state", *Physics Letters B*, Article vol. 759, pp. 313-321, Aug 2016.
- [96] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the $\Lambda(0)\bar{b} \rightarrow \Lambda\phi$ decay", *Physics Letters B*, Article vol. 759, pp. 282-292, Aug 2016.
- [97] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the mass and lifetime of the $\Omega\text{-}(0)\bar{b}$ baryon", *Physical Review D*, Article vol. 93, no. 9, p. 12, May 2016, Art. no. 092007.
- [98] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of forward W and Z boson production in association with jets in proton-proton collisions at $\sqrt{s}=8\text{ TeV}$ ", *Journal of High Energy Physics*, Article no. 5, p. 23, May 2016, Art. no. 131.
- [99] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for Violations of Lorentz Invariance and CPT Symmetry in $B\text{-}(s)(0)$ Mixing", *Physical Review Letters*, Article vol. 116, no. 24, p. 10, Jun 2016, Art. no. 241601.
- [100] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Model-independent measurement of the CKM angle gamma using $B\text{-}0 \rightarrow D\text{-}K^*$ decays with $D \rightarrow K(S)(0)\pi(+)2\pi(-)$ and $K(S)(0)K\text{-}K$ ", *Journal of High Energy Physics*, Article no. 6, p. 31, Jun 2016, Art. no. 131.
- [101] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Model-Independent Evidence for $J/\psi p$ Contributions to $\Lambda(0)\bar{b} \rightarrow J/\psi p\bar{K}(-)$ Decays", *Physical Review Letters*, Article vol. 117, no. 8, p. 9, Aug 2016, Art. no. 082002.
- [102] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Evidence for Exotic Hadron Contributions to $\Lambda(0)\bar{b} \rightarrow J/\psi p\bar{K}(-)$ Decays", *Physical Review Letters*, Article vol. 117, no. 8, p. 10, Aug 2016, Art. no. 082003.
- [103] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of CP observables in $B\text{-}+/- \rightarrow DK\text{-}+/-$ and $B\text{-}+/- \rightarrow D\text{-}p\bar{p}$ with two- and four-body D decays", *Physics Letters B*, Article vol. 760, pp. 117-131, Sep 2016.
- [104] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Angular analysis of the $B\text{-}0 \rightarrow K^*(0)\mu(+)2\mu(-)$ decay using 3 fb(-1) of integrated luminosity",

- [105] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of forward W and Z boson production in pp collisions at root s=8TeV", *Journal of High Energy Physics*, Article no. 1, p. 45, Jan 2016, Art. no. 155.
- [106] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Study of D-(*)(+)(sJ) mesons decaying to D*K-+(S)0 and D*K-0(+) final states", *Journal of High Energy Physics*, Article no. 2, p. 26, Feb 2016, Art. no. 133.
- [107] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "First observation of the rare B+ -> D+K+pi(-) decay", *Physical Review D*, Article vol. 93, no. 5, p. 11, Mar 2016, Art. no. 051101.
- [108] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Observation of B-s(0) -> (D)over-bar(0)K(S)(0) and Evidence for B-s(0) -> (D)over-bar*K-0(S)0 Decays", *Physical Review Letters*, Article vol. 116, no. 16, p. 9, Apr 2016, Art. no. 161802.
- [109] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "A new algorithm for identifying the flavour of B-s(0) mesons at LHCb", *Journal of Instrumentation*, Article vol. 11, p. 23, May 2016, Art. no. P05010.
- [110] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of the Difference of Time-Integrated CP Asymmetries in D-0 -> K-K+ and D-0 -> pi(-)pi(+) Decays", *Physical Review Letters*, Article vol. 116, no. 19, p. 10, May 2016, Art. no. 191601.
- [111] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of the B-s(0) -> D-s((*)D-)+(s)(*)(-) branching fractions", *Physical Review D*, Article vol. 93, no. 9, p. 11, May 2016, Art. no. 092008.
- [112] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "First Observation of D-0 - (D)over-bar(0) Oscillations in D-0 -> K+pi(-)pi(+)pi(-) Decays and Measurement of the Associated Coherence Parameters", *Physical Review Letters*, Article vol. 116, no. 24, p. 10, Jun 2016, Art. no. 241801.
- [113] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Constraints on the unitarity triangle angle gamma from Dalitz plot analysis of B-0 -> DK+pi(-) decays", *Physical Review D*, Article vol. 93, no. 11, p. 19, Jun 2016, Art. no. 112018.
- [114] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "First observation of the decay D-0 -> K-pi(+)mu(+)mu(-) in the rho(0)-omega region of the dimuon mass spectrum", *Physics Letters B*, Article vol. 757, pp. 558-567, Jun 2016.
- [115] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurements of prompt charm production cross-sections in pp collisions at root s=13 TeV", *Journal of High Energy Physics*, Article no. 3, p. 43, Mar 2016, Art. no. 159.
- [116] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Model-independent measurement of mixing parameters in D-0 -> K-S(0)pi(+)pi(-) decays", *Journal of High Energy Physics*, Article no. 4, p. 26, Apr 2016, Art. no. 033.
- [117] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "A precise measurement of the B-0 meson oscillation frequency", *European Physical Journal C*, Article vol. 76, no. 7, p. 14, Jul 2016, Art. no. 412.
- [118] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurements of long-range near-side angular correlations in root sN=5TeV proton-lead collisions in the forward region", *Physics Letters B*, Article vol. 762, pp. 473-483, Nov 2016.
- [119] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Search for the lepton-flavour violating decay D-0 -> e(+/-)mu(-/+)", *Physics Letters B*, Article vol. 754, pp. 167-175, Mar 2016.
- [120] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of the CP Asymmetry in B-s(0) - <(B)over bar>(0)s Mixing", *Physical Review Letters*, Article vol. 117, no. 6, p. 9, Aug 2016, Art. no. 061803.
- [121] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of the forward Z boson production cross-section in pp collisions at root s=13 TeV", *Journal of High Energy Physics*, Article no. 9, p. 33, Sep 2016, Art. no. 136.
- [122] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of the ratio of branching fractions B(B-c(+) -> J/psi K+)/B(B-c(+) -> J/psi pi(+))", *Journal of High Energy Physics*, Article no. 9, p. 15, Sep 2016, Art. no. 153.
- [123] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Amplitude analysis of B- -> D+pi(-)pi(-) decays", *Physical Review D*, Article vol. 94, no. 7, p. 23, Oct 2016, Art. no. 072001.
- [124] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Search for Structure in the B-s(0)pi(+/-) Invariant Mass Spectrum", *Physical Review Letters*, Article vol. 117, no. 15, p. 9, Oct 2016, Art. no. 152003.
- [125] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of forward W -> e nu production in pp collisions at root s=8 TeV", *Journal of High Energy Physics*, Article no. 10, p. 29, Oct 2016, Art. no. 030.
- [126] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurements of the S-wave fraction in B-0 -> K+ pi(-) mu(+) mu(-) decays and the B-0 -> K*(892)(0) mu(+) mu(-) differential branching fraction", *Journal of High Energy Physics*, Article no. 11, p. 30, Nov 2016, Art. no. 047.
- [127] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of the B-s(0) -> J/Psi eta lifetime", *Physics Letters B*, Article vol. 762, pp. 484-492, Nov 2016.
- [128] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "First study of the CP-violating phase and decay-width difference in B-s(0) -> psi(2S)phi decays", *Physics Letters B*, Article vol. 762, pp. 253-262, Nov 2016.
- [129] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Search for Higgs-like bosons decaying into long-lived exotic particles", *European Physical Journal C*, Article vol. 76, no. 12, p. 15, Dec 2016, Art. no. 664.
- [130] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Study of B-c(+) decays to the K+K-pi(+) final state and evidence for the decay B-c(+) -> chi(c0)pi(+)", *Physical Review D*, Article vol. 94, no. 9, p. 10, Nov 2016, Art. no. 091102.
- [131] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of the CKM angle gamma from a combination of LHCb results", *Journal of High Energy Physics*, Article no. 12, p. 59, Dec 2016, Art. no. 087.
- [132] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of CP Violation in B-0 -> D+D- Decays", *Physical Review Letters*, Article vol. 117, no. 26, p. 10, Dec 2016, Art. no. 261801.
- [133] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "First observation of the decay B-s(0) -> (KSK)-K-0*(892)(0) at LHCb", *Journal of High Energy Physics*, Article no. 1, p. 17, Jan 2016, Art. no. 012.
- [134] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Observation of the B (s) (0) -> aEuro parts per thousand J/psi l center dot l center dot decay", *Journal of High Energy Physics*, Article no. 3, pp. 1-18, Mar 2016, Art. no. 040.
- [135] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Studies of the resonance structure in D-0 -> (KSK +/-)-K-0 pi(-/+) decays", *Physical Review D*, Article vol. 93, no. 5, p. 35, Mar 2016, Art. no. 052018.
- [136] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Study of the production of A(b)(0) and (B)over-bar(0) hadrons in pp collisions and first measurement of the A(b)(0)-> J/psi pK(-) branching fraction", *Chinese Physics C*, Article vol. 40, no. 1, p. 16, Jan 2016, Art. no. 011001.
- [137] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of the properties of the l (b) (au 0) baryon", *Journal of High Energy Physics*, Article no. 5, p. 19, May 2016, Art. no. 161.
- [138] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Measurement of the CKM angle gamma using B (0) -> DK (*0) with D -> K-S(0) pi (+) pi (-) decays", *Journal of High Energy Physics*, Article no. 8, p. 30, Aug 2016, Art. no. 137.
- [139] V. Khachatryan,, **L. Cojocariu**, *LHCb Collaboration*, "Observation of the rare B-s(0)->mu(+)mu(-) decay from the combined analysis of CMS and LHCb data", *Nature*, Article vol. 522, no. 7554, pp. 68-U146, Jun 2015.
- [140] R. Aaij,, **L. Cojocariu**, *LHCb Collaboration*, "Evidence for the Strangeness-Changing Weak Decay Xi(-)(b) -> Lambda(0)(b)pi(-)", *Physical Review Letters*, Article vol. 115, no. 24, p. 10, Dec 2015, Art. no. 241801.

- [141] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Determination of gamma and-2 beta(s) from charmless two-body decays of beauty mesons", *Physics Letters B*, Article vol. 741, pp. 1-11, Feb 2015.
- [142] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the (η_c (1S) production cross-section in proton-proton collisions via the decay ($\eta_c(1S) \rightarrow p(\bar{p})\eta/\eta'$)", *European Physical Journal C*, Article vol. 75, no. 7, pp. 1-12, Jul 2015, Art. no. 311.
- [143] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Determination of the quark coupling strength vertical bar V-ub vertical bar using baryonic decays", *Nature Physics*, Article vol. 11, no. 9, pp. 743-+, Sep 2015.
- [144] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for long-lived particles decaying to jet pairs", *European Physical Journal C*, Article vol. 75, no. 4, p. 12, Apr 2015, Art. no. 152.
- [145] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the branching fraction ratio $B(B-c(+ \rightarrow \psi(2S)\pi(+))/B(B-c(+ \rightarrow J/\psi\pi(+))$ ", *Physical Review D*, Article vol. 92, no. 7, p. 10, Oct 2015, Art. no. 072007.
- [146] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "First observation and amplitude analysis of the $B \rightarrow D+K-\pi(-)$ decay", *Physical Review D*, Article vol. 91, no. 9, p. 24, May 2015, Art. no. 092002.
- [147] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Identification of beauty and charm quark jets at LHCb", *Journal of Instrumentation*, Article vol. 10, p. 29, Jun 2015, Art. no. P06013.
- [148] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Differential branching fraction and angular analysis of $\Lambda(0)b \rightarrow \Lambda\mu(+)mu(-)$ decays", *Journal of High Energy Physics*, Article no. 6, p. 29, Jun 2015.
- [149] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the time-dependent CP asymmetries in $B-s(0) \rightarrow J/\psi K-S(0)$ ", *Journal of High Energy Physics*, Article no. 6, p. 22, Jun 2015, Art. no. 131.
- [150] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "First observation and measurement of the branching fraction for the decay $B-s(0) \rightarrow D-s^*K-/(+-)$ ", *Journal of High Energy Physics*, Article no. 6, p. 16, Jun 2015, Art. no. 130.
- [151] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of CP violation in $B-/+ \rightarrow Dh(-/)$ ($h = K, \pi$) with the modes $D \rightarrow K-/+pi(+-)\pi(0)$, $D \rightarrow pi(+/-)\pi(0)$ and $D \rightarrow K+K-\pi(0)$ ", *Physical Review D*, Article vol. 91, no. 11, p. 15, Jun 2015, Art. no. 112014.
- [152] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of CP Violation in $B-0 \rightarrow J/\psi K-S(0)$ Decays", *Physical Review Letters*, Article vol. 115, no. 3, p. 9, Jul 2015, Art. no. 031601.
- [153] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Amplitude analysis of $B-0 \rightarrow (D)\overline{\text{over-bar}}0K(+)pi(-)$ decays", *Physical Review D*, Article vol. 92, no. 1, p. 24, Jul 2015, Art. no. 012012.
- [154] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the decay $(B)\overline{\text{over-bar}}(s)(0) \rightarrow \psi(2S)K+\pi(-)$ ", *Physics Letters B*, Article vol. 747, pp. 484-494, Jul 2015.
- [155] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the $B-0 \rightarrow \rho(0)\rho(0)$ decay from an amplitude analysis of $B-0 \rightarrow (\pi(+)pi(-))(\pi(+)pi(-))$ decays", *Physics Letters B*, Article vol. 747, pp. 468-478, Jul 2015.
- [156] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Quantum numbers of the $X(3872)$ state and orbital angular momentum in its $\rho(0)J/\psi$ decay", *Physical Review D*, Article vol. 92, no. 1, p. 9, Jul 2015, Art. no. 011102.
- [157] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for the decay $B-s(0) \rightarrow (D)\overline{\text{over-bar}}(0)f(0)(980)$ ", *Journal of High Energy Physics*, Article no. 8, p. 19, Aug 2015, Art. no. 005.
- [158] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the forward Z boson production cross-section in pp collisions at root s=7 TeV", *Journal of High Energy Physics*, Article no. 8, p. 37, Aug 2015, Art. no. 039.
- [159] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for the $\Lambda(0)b \rightarrow \Lambda\eta$ and $\Lambda(0)b \rightarrow \Lambda\eta'$ decays with the LHCb detector", *Journal of High Energy Physics*, Article no. 9, p. 21, Sep 2015, Art. no. 006.
- [160] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "First Observation of Top Quark Production in the Forward Region", *Physical Review Letters*, Article vol. 115, no. 11, p. 10, Sep 2015, Art. no. 112001.
- [161] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of W boson production in association with beauty and charm", *Physical Review D*, Article vol. 92, no. 5, p. 16, Sep 2015, Art. no. 052001.
- [162] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the exclusive gamma production cross-section in pp collisions at root s=7 TeV and 8 TeV", *Journal of High Energy Physics*, Article no. 9, p. 20, Sep 2015, Art. no. 084.
- [163] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for long-lived heavy charged particles using a ring imaging Cherenkov technique at LHCb", *European Physical Journal C*, Article vol. 75, no. 12, p. 14, Dec 2015, Art. no. 595.
- [164] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of $B \rightarrow DK-\pi(+)pi(-)$ and $B- \rightarrow D\pi(-)\pi(+)pi(-)$ decays and determination of the CKM angle gamma", *Physical Review D*, Article vol. 92, no. 11, p. 20, Dec 2015, Art. no. 112005.
- [165] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of $J/\psi p$ Resonances Consistent with Pentaquark States in $\Lambda(0)b \rightarrow J/\psi K-\)p Decays", *Physical Review Letters*, Article vol. 115, no. 7, p. 15, Aug 2015, Art. no. 072001.$
- [166] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the Ratio of Branching Fractions $B((B)\overline{\text{over-bar}}(0) \rightarrow D-*(+)\tau(-)(\nu)\overline{\text{over-bar}}(\tau)/B(B)\overline{\text{over-bar}}(0) \rightarrow D-*(+)\mu(-)(\nu)\overline{\text{over-bar}}(\mu))$ ", *Physical Review Letters*, Article vol. 115, no. 11, p. 10, Sep 2015, Art. no. 111803.
- [167] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Angular analysis and differential branching fraction of the decay $B-s(0) \rightarrow \phi\mu(+)mu(-)$ ", *Journal of High Energy Physics*, Article no. 9, p. 35, Sep 2015, Art. no. 179.
- [168] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "B flavour tagging using charm decays at the LHCb experiment", *Journal of Instrumentation*, Article vol. 10, p. 16, Oct 2015, Art. no. P10005.
- [169] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "First measurement of the differential branching fraction and CP asymmetry of the $B-/+ \rightarrow \pi(+)mu(+)mu(-)$ decay", *Journal of High Energy Physics*, Article no. 10, p. 21, Oct 2015, Art. no. 034.
- [170] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the $B(s)(0) \rightarrow aEuro$ parts per thousand I center dot I center dot branching fraction and search for the decay $B(0) \rightarrow \phi\phi$ ", *Journal of High Energy Physics*, Article no. 10, p. 18, Oct 2015, Art. no. 053.
- [171] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the time-integrated CP asymmetry in $D-0 \rightarrow (KSKS0)-K-0$ decays", *Journal of High Energy Physics*, Article no. 10, p. 15, Oct 2015, Art. no. 055.
- [172] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for Hidden-Sector Bosons in $B-0 \rightarrow K^*(0)\mu(+)mu(-)$ Decays", *Physical Review Letters*, Article vol. 115, no. 16, p. 10, Oct 2015, Art. no. 161802.
- [173] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of forward J/ψ production cross-sections in pp collisions at root s=13 TeV", *Journal of High Energy Physics*, Article no. 10, p. 29, Oct 2015, Art. no. 172.
- [174] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of CP violation parameters and polarisation fractions in $B-s(0) \rightarrow J/\psi(K)\overline{\text{over-bar}}(0)$ decays", *Journal of High Energy Physics*, Article no. 11, p. 38, Nov 2015, Art. no. 082.
- [175] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Forward production of Upsilon mesons in pp collisions at root s=7 and 8 TeV", *Journal of High Energy Physics*, Article no. 11, pp. 1-34, Nov 2015, Art. no. 103.
- [176] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the forward-backward asymmetry in $Z/\gamma\gamma^* \rightarrow \mu(+)mu(-)$ decays and determination of the effective weak mixing angle", *Journal of High Energy Physics*, Article no. 11, p. 19, Nov 2015, Art. no. 190.
- [177] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for the rare decays $B-0 \rightarrow J/\psi\gamma$ and $B-s(0) \rightarrow J/\psi\gamma$ ", *Physical Review D*,

- Article vol. 92, no. 11, p. 9, Dec 2015, Art. no. 112002.
- [178] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for CP violation in $D^- \rightarrow \pi^-(\bar{\nu})\pi^+(\nu)$ decays with the energy test", *Physics Letters B*, Article vol. 740, pp. 158-167, Jan 2015.
- [179] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the Z plus b-jet cross-section in pp collisions at root s=7 TeV in the forward region", *Journal of High Energy Physics*, Article no. 1, p. 15, Jan 2015, Art. no. 064.
- [180] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the Semileptonic CP Asymmetry in B^-/\bar{B}^0 Mixing", *Physical Review Letters*, Article vol. 114, no. 4, p. 9, Jan 2015, Art. no. 041601.
- [181] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Precision Measurement of CP Violation in $B^-S(0) \rightarrow J/\psi K^-K^-$ Decays", *Physical Review Letters*, Article vol. 114, no. 4, p. 9, Jan 2015, Art. no. 041801.
- [182] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of Two New $\Xi^-(\bar{b})$ Baryon Resonances", *Physical Review Letters*, Article vol. 114, no. 6, p. 9, Feb 2015, Art. no. 062004.
- [183] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for the lepton flavour violating decay $\tau^- \rightarrow \mu^-(\bar{\nu})\mu^+(\nu)\mu^-(\bar{\nu})$ ", *Journal of High Energy Physics*, Article no. 2, pp. 1-20, Feb 2015, Art. no. 121.
- [184] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the lifetime of the $B^-c(+) \rightarrow J/\psi \pi^+$ decay mode", *Physics Letters B*, Article vol. 742, pp. 29-37, Mar 2015.
- [185] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "LHCb detector performance", *International Journal of Modern Physics A*, Review vol. 30, no. 7, p. 73, Mar 2015, Art. no. 1530022.
- [186] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of $B^-c(+) \rightarrow D^-/\bar{D}^0$ Production in Proton-Proton Collisions at root s=8 TeV", *Physical Review Letters*, Article vol. 114, no. 13, p. 9, Apr 2015, Art. no. 132001.
- [187] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Precise measurements of the properties of the $B^-1(5721)(0,+)$ and $B^-2^*(5747)(0,+)$ states and observation of $B^-_+/\bar{B}^-_0 \pi^-(\bar{\nu})$ mass structures", *Journal of High Energy Physics*, Article no. 4, p. 27, Apr 2015, Art. no. 024.
- [188] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of the rare $B^-s(0)$ and B^-0 decays into the $\pi^+(\bar{\nu})\pi^-(\nu)\mu^+(\bar{\nu})\mu^-(\nu)$ final state", *Physics Letters B*, Article vol. 743, pp. 46-55, Apr 2015.
- [189] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of indirect CP asymmetries in $D^- \rightarrow K^-K^-$ and $D^-0 \rightarrow \pi^-(\bar{\nu})\pi^+(\nu)$ decays using semileptonic B decays", *Journal of High Energy Physics*, Article no. 4, p. 19, Apr 2015, Art. no. 043.
- [190] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Angular analysis of the $B^-0 \rightarrow K^*(0) e^+ e^-$ decay in the low-q(2) region", *Journal of High Energy Physics*, Article no. 4, p. 23, Apr 2015, Art. no. 064.
- [191] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Determination of the branching fractions of $B^-s(0) \rightarrow D^-s(\bar{s}) K^-/\bar{K}^0$ and $B^-0 \rightarrow D^-s/\bar{D}^0 K^-/\bar{K}^0$ ", *Journal of High Energy Physics*, Article no. 5, p. 16, May 2015, Art. no. 019.
- [192] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of the $B^-s(0) \rightarrow \eta/\eta'$ Decay", *Physical Review Letters*, Article vol. 115, no. 5, p. 9, Jul 2015, Art. no. 051801.
- [193] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of CP asymmetries and polarisation fractions in $B^-s(0) \rightarrow K^*(0)K^-/\bar{K}^0$ decays", *Journal of High Energy Physics*, Article no. 7, p. 28, Jul 2015, Art. no. 166.
- [194] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Dalitz plot analysis of $B^-0 \rightarrow (D^-/\bar{D}^0)\pi^+(\bar{\nu})\pi^-(\nu)$ decays", *Physical Review D*, Article vol. 92, no. 3, p. 40, Aug 2015, Art. no. 032002.
- [195] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of forward $Z \rightarrow e^+e^-$ production at root s=8 TeV", *Journal of High Energy Physics*, Article no. 5, p. 21, May 2015, Art. no. Unsp 109.
- [196] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the CP-violating phase beta in $B^-0 \rightarrow J/\psi \pi^+(\bar{\nu})\pi^-(\nu)$ decays and limits on penguin effects", *Physics Letters B*, Article vol. 742, pp. 38-49, Mar 2015.
- [197] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Study of eta-eta' mixing from measurement of $B^-s(0) \rightarrow J/\psi \eta/\eta'$ decay rates", *Journal of High Energy Physics*, Article no. 1, pp. 1-24, Jan 2015, Art. no. 024.
- [198] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the inelastic pp cross-section at a centre-of-mass energy of root s=7 TeV", *Journal of High Energy Physics*, Article no. 2, p. 16, Feb 2015, Art. no. 129.
- [199] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the CP-Violating Phase phi(s) in $(B^-/\bar{B}^0)s(0) \rightarrow D^-s/\bar{D}^0 s$ Decays", *Physical Review Letters*, Article vol. 113, no. 21, p. 9, Nov 2014, Art. no. 211801.
- [200] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Search for CP violation using T-odd correlations in $D^-0 \rightarrow K^-K^-/\bar{K}^0\pi^0$ decays", *Journal of High Energy Physics*, Article no. 10, p. 21, Oct 2014, Art. no. 005.
- [201] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "First Observation of a Baryonic $B^-c(+) \rightarrow D^-/\bar{D}^0 \pi^+(\bar{\nu})\pi^-(\nu)$ Decay", *Physical Review Letters*, Article vol. 113, no. 15, p. 9, Oct 2014, Art. no. 152003.
- [202] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the chi(b) (3 P) mass and of the relative rate of chi(b1) (1 P) and chi(b2) (1 P) production", *Journal of High Energy Physics*, Article no. 10, p. 22, Oct 2014, Art. no. 088.
- [203] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the CKM angle gamma using $B^-/\bar{B}^0 \rightarrow D^-/\bar{D}^0 \pi^+(\bar{\nu})\pi^-(\nu)$ with $D \rightarrow K-S(0)\pi^+(\bar{\nu})\pi^-(\nu)$ ", *Journal of High Energy Physics*, Article no. 10, pp. 1-52, Oct 2014, Art. no. 097.
- [204] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of charmonium pairs produced exclusively in pp collisions", *Journal of Physics G-Nuclear and Particle Physics*, Article vol. 41, no. 11, p. 17, Nov 2014, Art. no. Unsp 115002.
- [205] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Precision luminosity measurements at LHCb", *Journal of Instrumentation*, Article vol. 9, p. 91, Dec 2014, Art. no. P12005.
- [206] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Observation of $B^-s(0) \rightarrow K^*(\bar{s}) K^-/\bar{K}^0$ and evidence for $B^-s(0) \rightarrow K^*(\bar{s}) \pi^+(\bar{\nu})\pi^-(\nu)$ decays", *New Journal of Physics*, Article vol. 16, p. 18, Dec 2014.
- [207] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Precision Measurement of the Mass and Lifetime of the $\Xi^-(\bar{b})$ Baryon", *Physical Review Letters*, Article vol. 113, no. 24, p. 9, Dec 2014, Art. no. 242002.
- [208] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurements of CP violation in the three-body phase space of charmless B^-/\bar{B}^0 decays", *Physical Review D*, Article vol. 90, no. 11, p. 17, Dec 2014, Art. no. 112004.
- [209] R. Aaij,, L. **Cojocariu**, *LHCb Collaboration*, "Measurement of the $(B^-/\bar{B}^0)s(0)$ production asymmetries in pp collisions at root s=7 TeV", *Physics Letters B*, Article vol. 739, pp. 218-228, Dec 2014.