

INFORMAȚII PERSONALE



Lucian Nicolae Cojocariu

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Sexul Masculin | Data nașterii 06/12/1986 | Naționalitatea română

POZIȚIA Asistent Cercetare

EXPERIENȚA PROFESIONALĂ

2013–Prezent

Asistent Cercetare Științifică

Institutul Național de Cercetare-Dezvoltare pentru Fizică și Inginerie Nucleară Horia Hulubei Reactorului 30, 077125 Magurele (România)
<http://www.nipne.ro/dpp/Collab/LHCb/>

Proiectarea și implementarea de standuri experimentale pentru evaluarea toleranței la radiații ionizante a dispozitivelor semiconductoare destinate experimentelor din fizica energiilor înalte.

Tipul sau sectorul de activitate Cercetare-dezvoltare

2008–2013

Asistent Cercetare

Universitatea „Ștefan cel Mare” Suceava
Universității 13, 720229 Suceava (România)
www.usv.ro

Proiectarea și realizare cablajelor imprimate. Proiectarea și implementarea sistemelor de comunicații ce utilizează unde electromagnetice din spectrul vizibil (VLC Systems). Studiu sistemelor și aplicațiilor de telemedicină. Studiu sistemelor și aplicațiilor bazate pe RFID.

Tipul sau sectorul de activitate Învățământ superior

EDUCAȚIE ȘI FORMARE

2012–2017

Doctorand în domeniul Inginerie Electronică și Telecomunicații

Universității 13, 720229 Suceava (România)
www.usv.ro

Contribuții la testarea și caracterizarea dispozitivelor electronice cu aplicații în experimentele „Large Hadron Collider” (LHC), CERN.

09/2012

Stagiu practic

Laboratoire d'Ingénierie des Systèmes de Versailles din Universitatea Versailles Velizy, 78140 Versailles (Franța)
www.lisv.uvsq.fr/

Proiectarea și implementarea etajului ce realizează amplificarea adaptativă a semnalului electric rezultat în urma detecție cu fotodiodă PIN. Dispozitivul fotodetector era parte a receptorului sistemului de comunicații unidirecțional ce utilizează unde electromagnetice din spectrul vizibil (VLC), sistem dezvoltat ca parte integrată a infrastructurii de transport inteligeinte (ITS).

2010–2013	Diplomă de master
	<p>Facultatea de Inginerie Electrică și Știința Calculatoarelor din Universitatea „Ștefan cel Mare” Suceava Universității 13, 720229 Suceava (România) http://www.eed.usv.ro/fesc/</p> <p><i>Fundamentele calculatoarelor și rețelelor de comunicație, Sisteme fără fir pentru comunicatii, Analiza si managementul datelor</i></p>
07/2011–09/2011	<p>Stagiu de pregătire practică și teoretică în cadrul programului intitulat „CERN Summer Student Programme”</p> <p>European Organization for Nuclear Research (CERN), Geneva (Elveția) http://home.cern/</p> <p>Automatizarea procesului de măsurare și testare a unui circuit integrat ce îngloba diferite tipuri constructive de tranzistoare. În timpul testelor, dispozitivul a fost expus la diferite doze de radiații X și s-au monitorizat parametrii electrici pentru fiecare tip de tranzistor.</p>
2007–2011	<p>Inginer în domeniul Inginerie și Management</p> <p>Facultatea de Inginerie Electrică și Știința Calculatoarelor Universitatea „Ștefan cel Mare” Suceava Universității 13, 720229 Suceava (România) www.eed.usv.ro/fesc/</p> <p>Discipline Generale: - Fizică, Engleză, Analiză matematică, Matematici speciale;</p> <p>Discipline Tehnice: - Fiabilitate, Piața de energie, Măsurări electrice senzori și traductoare, Bazele electrotehnicii, Teoria materialelor electrotehnice, Producerea transportul și distribuția energiei electrice, Convertoare statice, Echipamente electrice, Roboti industriali;</p> <p>Discipline Economice: - Bazele economiei, Statistică, Contabilitate, Marketing, Management.</p>
02/2009–06/2009	<p>Certificat de Mobilitate Europas</p> <p>Universitatea KaHo Sint-Lievent Gent Gebroeders De Smetstraat 1, 9000 Gent (Belgia) www.kuleuven.be/english</p> <p>Studiul și aplicațiile sistemelor RFID ce funcționează la joasă frecvență.</p>
2006–2010	<p>Inginer în domeniul Electronică și Telecomunicații</p> <p>Facultatea de Inginerie Electrică și Știința Calculatoarelor Universitatea „Ștefan cel Mare” Suceava Universității 13, 720229 Suceava (România) http://www.eed.usv.ro/fesc/</p> <p>Discipline Generale: - Fizică, Engleză, Analiză matematică, Matematici speciale;</p> <p>Discipline Tehnice: - Dispozitive și circuite electronice, Analiza și sinteza circuitelor, Circuite integrate digitale, Circuite integrate analogice, Măsurări electrice senzori și traductoare, Optoelectronică, Microunde, Domotică, Microcontrolere, Televiziune, Rețele de calculatoare.</p>
2002–2006	<p>Diplomă Bacalaureat</p> <p>Colegiul tehnic „Alexandru Ioan Cuza” Calea Unirii 47, Suceava (România)</p>

www.ctalicuza.ro

Discipline Generale:

- Matematică, Fizică, Franceză, Geografie, Istorie;

Discipline Tehnice:

- Electronică analogică, Electronică digitală, Măsurari electrice și electronice, Desen tehnic.

COMPETENȚE PERSONALE

Limba(i) maternă(e)

română

Alte limbi străine cunoscute

	ÎNTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
engleză	C1	C1	B2	B2	B1
franceză	B1	B2	A1	A1	A2

Niveluri: A1 și A2: Utilizator elementar - B1 și B2: Utilizator independent - C1 și C2: Utilizator experimentat

Cadrul european comun de referință pentru limbi străine

Competențe de comunicare

Capacitatea de a expune în mod logic datele unei probleme și soluțiile aferent de rezolvare. Aptitudinea de a elabora diagrame sau alte elemente grafice ajutătoare pentru a-l face pe alții să înțeleagă tema abordată. Predispoziția de a iniția și susține conversații pe subiecte diverse.

Competențe organizaționale/manageriale

Experiență în gestionarea activităților pe etape de desfășurare. Atenție la detaliile legate de modul în care se derulează un proiect de cercetare-dezvoltare. Bune calități organizatorice dobândite pe baza implicării în organizarea de concursuri de electronică la nivel județean, respectiv în urma participării la numeroase activități de cercetare ce au avut loc în laboratoare din țară și străinătate.

Competențe dobândite la locul de muncă

Spirit de echipă, cât și competițional dobândit ca urmarea implicării în activități de cercetare desfășurate în laboratoare de cercetare din țară și străinătate. Capacitatea de a duce o muncă susținută în vederea realizării la termen a obiectivelor proiectului în care sunt implicați.

Competență digitală

AUTOEVALUARE				
Procesarea informației	Comunicare	Creare de conținut	Securitate	Rezolvarea de probleme
Utilizator experimentat				

Competențele digitale - Grilă de auto-evaluare

Permis de conducere

B

Anexe

Listă publicații

Data,

12.04.2017

Semnătura,



Listă publicații

- [1] V. M. Placinta, **L. N. Cojocariu**, and C. Ravariu, "Test bench design for radiation tolerance of two ASIC's," *Romanian Journal of Physics (RJP)*, 2017.
- [2] M. K. Baszczyk, M. Benettoni, **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.
- [3] **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.
- [4] 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.
- [5] R. Aaij, B. Adeva, **L. Cojocariu**, and LHCb. Collaboration, "Search for long-lived heavy charged particles using a ring imaging Cherenkov technique at LHCb," *European Physical Journal C*, vol. 75, Dec 2015.
- [6] R. Aaij, B. Adeva, **L. Cojocariu**, and LHCb Collaboration, "LHCb detector performance," *International Journal of Modern Physics A*, vol. 30, Mar 10 2015.
- [7] **L. N. Cojocariu** and V. Popa, "Design of a multi-input-multiple-output visible light communication system for transport infrastructure to vehicle communication," *IEEE Xplore, International Conference on Development and Application Systems (DAS)*, pp. 93-96, 2014.
- [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.

Articole ca și membru în lista de autori a Colaborării LHCb

- [1] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Observation of Lambda(0)(b) -> psi (2S)pK(-) and Lambda(0)(b) -> J/psi pi(+)pi(-)pK(-) decays and a measurement of the A(b)(0) baryon mass," *Journal of High Energy Physics*, May 2016.
- [2] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Search for the lepton-flavour violating decay D-0 -> e(+/-)mu(-/+)," *Physics Letters B*, vol. 754, pp. 167-175, Mar 2016.
- [3] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "A precise measurement of the B-0 meson oscillation frequency," *European Physical Journal C*, vol. 76, Jul 2016.
- [4] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Measurements of prompt charm production cross-sections in pp collisions at root s=13 TeV," *Journal of High Energy Physics*, Mar 2016.
- [5] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Model-independent measurement of mixing parameters in D-0 -> K-S(0)pi(+)pi(-) decays," *Journal of High Energy Physics*, Apr 2016.

- [6] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, 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*, vol. 757, pp. 558-567, Jun 2016.
- [7] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "A new algorithm for identifying the flavour of B-s(0) mesons at LHCb," *Journal of Instrumentation*, vol. 11, May 2016.
- [8] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Constraints on the unitarity triangle angle gamma from Dalitz plot analysis of B-0 -> DK+pi(-) decays," *Physical Review D*, vol. 93, Jun 2016.
- [9] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, 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*, vol. 116, Jun 2016.
- [10] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "First observation of the rare B+ -> D+K+pi(-) decay," *Physical Review D*, vol. 93, Mar 2016.
- [11] R. Aaij, C. A. Beteta, L. Cojocariu et al, LHCb Collaboration, "Measurement of forward W and Z boson production in pp collisions at root s=8TeV," *Journal of High Energy Physics*, Jan 2016.
- [12] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Measurement of the B-s(0) -> D-s((*)D-)+(s)(*)() branching fractions," *Physical Review D*, vol. 93, May 2016.
- [13] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, 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*, vol. 116, May 2016.
- [14] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, 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*, vol. 116, Apr 2016.
- [15] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Study of D-(*)()(+)(sJ) mesons decaying to D*K-+(S)0 and D*K-0(+) final states," *Journal of High Energy Physics*, Feb 2016.
- [16] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Angular analysis of the B-0 -> K*(0) mu(+) mu(-) decay using 3 fb(-1) of integrated luminosity," *Journal of High Energy Physics*, Feb 2016.
- [17] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Measurement of the mass and lifetime of the Omega(-)(b) baryon," *Physical Review D*, vol. 93, May 2016.
- [18] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Model-Independent Evidence for J/psi p Contributions to Lambda(0)(b) -> J/psi pK(-) Decays," *Physical Review Letters*, vol. 117, Aug 2016.
- [19] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Model-independent measurement of the CKM angle gamma using B-0 -> DK*0 decays with D -> K (S) (0) pi (+)pi (-) and K (S) (0) K+K," *Journal of High Energy Physics*, Jun 2016.
- [20] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Search for Violations of Lorentz Invariance and CPT Symmetry in B-(s)(0) Mixing," *Physical Review Letters*, vol. 116, Jun 2016.
- [21] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Evidence for Exotic Hadron Contributions to Lambda(0)(b) -> J/psi p pi(-) Decays," *Physical Review Letters*, vol. 117, Aug 2016.
- [22] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Measurement of forward W and Z boson production in association with jets in proton-proton collisions at root s=8 TeV," *Journal of High Energy Physics*, May 2016.
- [23] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Observation of the Lambda(0)(b) -> Lambda phi decay," *Physics Letters B*, vol. 759, pp. 282-292, Aug 2016.
- [24] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Search for B-c(+) decays to the p(p)over-bar pi(+) final state," *Physics Letters B*, vol. 759, pp. 313-321, Aug 2016.
- [25] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Observations of Lambda(0)(b) -> Lambda K+pi(-) and Lambda(0)(b) -> Lambda K+K- decays and searches for other Lambda(0)(b) and Xi(0)(b) decays to Lambda h(+)(-) final states," *Journal of High Energy Physics*, May 2016.

- [26] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Study of psi(2S) production and cold nuclear matter effects in pPb collisions at root s(NN)=5 TeV," *Journal of High Energy Physics*, Mar 2016.
- [27] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, "Measurement of CP observables in $B \rightarrow DK$ and $B \rightarrow D\pi$ with two- and four-body D decays," *Physics Letters B*, vol. 760, pp. 117-131, Sep 2016.
- [28] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, "Production of associated Y and open charm hadrons in pp collisions at root s=7 and 8 TeV via double parton scattering," *Journal of High Energy Physics*, Jul 2016.
- [29] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Study of the production of A(b)(0) and $(B)\bar{B}$ hadrons in pp collisions and first measurement of the $A(b)(0) \rightarrow J/\psi pK^-$ branching fraction," *Chinese Physics C*, vol. 40, Jan 2016.
- [30] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Observation of the $B_s(0) \rightarrow aEuro$ parts per thousand J/psi I center dot I center dot decay," *Journal of High Energy Physics*, pp. 1-18, Mar 2016.
- [31] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Studies of the resonance structure in $D_0 \rightarrow (K\bar{K})\pi$ decays," *Physical Review D*, vol. 93, Mar 2016.
- [32] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "First observation of the decay $B_s(0) \rightarrow (K\bar{K})\pi$ at LHCb," *Journal of High Energy Physics*, Jan 2016.
- [33] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Measurement of CP Violation in $B_0 \rightarrow D^+D^-$ Decays," *Physical Review Letters*, vol. 117, Dec 2016.
- [34] R. Aaij, B. Adeva, L. Cojocariu et al, LHCb Collaboration, "Measurements of the S-wave fraction in $B_0 \rightarrow K^+\pi^-$ decays and the $B_0 \rightarrow K^*(892)(0)$ differential branching fraction," *Journal of High Energy Physics*, Nov 2016.
- [35] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Amplitude analysis of $B_0 \rightarrow D^+\pi^-$ decays," *Physical Review D*, vol. 94, Oct 2016.
- [36] R. Aaij, B. Adeva, L. Cojocariu et al, LHCb Collaboration, "Measurement of forward $W \rightarrow e\nu$ production in pp collisions at root s=8 TeV," *Journal of High Energy Physics*, Oct 2016.
- [37] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Measurement of the CP Asymmetry in $B_s(0) -<(B)\bar{B}>(0)$ Mixing," *Physical Review Letters*, vol. 117, Aug 2016.
- [38] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Search for Structure in the $B_s(0)\pi^{(\pm)}$ Invariant Mass Spectrum," *Physical Review Letters*, vol. 117, Oct 2016.
- [39] R. Aaij, C. Abellán Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Measurements of prompt charm production cross-sections in pp collisions at root s = 13 TeV (vol 3, 159, 2016)," *Journal of High Energy Physics*, Sep 2016.
- [40] R. Aaij, C. Abellán Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Measurement of the CKM angle gamma using $B(0) \rightarrow DK$ with $D \rightarrow K-S(0)\pi^+\pi^-$ decays," *Journal of High Energy Physics*, Aug 2016.
- [41] R. Aaij, C. Abellán Beteta, **L. Cojocariu** et al, "Measurement of the properties of the I(b)(au0) baryon," *Journal of High Energy Physics*, May 2016.
- [42] V. Khachatryan, A. M. Sirunyan, **L. Cojocariu** et al, LHCb Collaboration, "Observation of the rare $B_s(0) \rightarrow \mu^+\mu^-$ decay from the combined analysis of CMS and LHCb data," *Nature*, vol. 522, pp. 68-U146, Jun 2015.
- [43] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Measurement of the $\eta_c(1S)$ production cross-section in proton-proton collisions via the decay $\eta_c(1S) \rightarrow p(p)\bar{p}$," *European Physical Journal C*, vol. 75, pp. 1-12, Jul 2015.
- [44] R. Aaij, C. A. Beteta, **L. Cojocariu** et al, LHCb Collaboration, "Evidence for the Strangeness-Changing Weak Decay $\Xi^-(b) \rightarrow \Lambda(0)(b)\pi^-$," *Physical Review Letters*, vol. 115, Dec 2015.
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- [46] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "B flavour tagging using charm decays at the

- LHCb experiment," *Journal of Instrumentation*, vol. 10, Oct 2015.
- [47] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Identification of beauty and charm quark jets at LHCb," *Journal of Instrumentation*, vol. 10, Jun 2015.
- [48] R. Aaij, B. Adeva, L. Cojocariu et al, 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*, Feb 2015.
- [49] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Study of eta-eta ' mixing from measurement of B-(s)(0) -> J/psi eta((')) decay rates," *Journal of High Energy Physics*, pp. 1-24, Jan 2015.
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- [52] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Measurement of B-c(+) Production in Proton-Proton Collisions at root s=8 TeV," *Physical Review Letters*, vol. 114, Apr 2015.
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- [58] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Study of the rare B-s(0) and B-0 decays into the pi(+) pi(-) mu(+) mu(-) final state," *Physics Letters B*, vol. 743, pp. 46-55, Apr 2015.
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- [61] R. Aaij, B. Adeva, **L. Cojocariu** et al, LHCb Collaboration, "Angular analysis and differential branching fraction of the decay B-s(0) -> phi mu(+)mu(-)," *Journal of High Energy Physics*, Sep 2015.
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