Professional summary

Experimental physicist. Experience with programming, electronics and automation. Extremely interested in aviation.

Personal information

Name / Surname	**Hering, Eduardo Novaes**
Address	São José dos Campos, SP, Brazil.
Personal Email	enhering@gmail.com
Nationality	Brazil and Switzerland
Date of birth	March 15th, 1973
LinkedIn profile	https://www.linkedin.com/in/eduardo-novaes-hering-3bbb43/

Work Experience

Dates	06/2020-now
Occupation or position held	Company Owner.
Main activities and responsibilities	– Development of software for crypto currency market. – Development of software and hardware for a modular unmanned vehicle control system. – Development of software robots that integrate with Telegram. – Development of simulation solutions in C++.
Type of business or sector	Software development.

Dates	07/2021-now
Occupation or position held	Senior C++ software developer.
Main activities and responsibilities	– Ericsson Billing Design Maintenance (T3 support). – Ericsson Automation and Integration Team (AIT). – Ericsson Billing Emergency Response (ROTA).
Name and address of employer	FITec.org.br
Type of business or sector	C++ Software development.

Dates	08/2019-06/2021
Occupation or position held	(Embedded) Software developer.

Main activities and responsibilities	– Development of an embedded agent in C++ to collect wifi mesh network topology data. – Embarkment the agent into reference design modems. – Creation of a portable infrastructure to support this agent, including registration and command agents in docker containers. – Creation of a web api (C++) to connect users and control agents, facilitating the sending of commands, retrieval of information and isolating the main infrastrucutre from external visitors. – Creation of a production infrastructure to support 200000+ connections. – Dealing with telecom company representatives and modem vendors to put the system into production state. – Upgrading and maintaining the agent to keep it in sync with new requirements. – Modification of BWMA to comply with the requirements for a broader scope agent, including flexible data collection and scheduling capabilities.
Name and address of employer	Beegol.com.
Type of business or sector	Embedded software development, telecom.
Dates	01/2018-12/2018
Occupation or position held	Post doctoral Fellow.
Main activities and responsibilities	I developed a system to acquire dynamic speckle images of biological specimens and detect sample activity in real time. The main objective was to select active seeds from inactive ones and increase plantation efficiency. During this time I have also rewritten an old n-body simulation program to use as a research and teaching tool.
Name and address of employer	Federal University of Roraima (www.ufrr.br).
Type of business or sector	Research and Development.
Dates	01/2013-12/2014
Occupation or position held	Post doctoral fellow.
Main activities and responsibilities	On this period I've done research on condensed matter physics, studying the RTm_2Al_{20} (R: Rare Earth, Tm: Transition metal) systems under very high pressures (>100kbar), very low temperatures (<50mK) and high magnetic fields (>20T). Diamond anvil cells (DAC) were used for electrical resistivity, magnetic susceptibility and AC specific heat measurements. Synchrotron radiation (XMCD) was also used to characterize other families of samples.
Name and address of employer	INAC/SPSMS/IMAPEC, CEA Grenoble.
Type of business or sector	Research and Development.
Dates	2010 - 2012
Occupation or position held	Post doctoral Fellow.
Main activities and responsibilities	Development of low temperature instruments and components to permit various scientific characterization techniques to reach temperatures below 1K. During this period I also worked on the maintenance of the lab flux cryostats, of the ADR and of the dilution fridge, plus occasional services in the Helium liquefaction plant.
Name and address of employer	Elisa M. Baggio-Saitovitch, at Brazilian Center for Physics Research - CBPF.
Type of business or sector	Research and Development.
Dates	2007 - 2009
Occupation or position held	Post doctoral fellow.

Main activities and responsibilities	Construction of a low temperature environment for the development of low temperature components, supervised by Prof. Magda B. Fontes. An existing vacuum chamber was adapted to receive cryogenic lines for LHe and LN2 and a 1K pot was built inside it. During this period I also worked on the maintenance of the lab flux cryostats, of the ADR and of the dilution fridge, plus occasional services in the Helium liquefaction plant.
Name and address of employer	Magda B. Fontes, CBPF.
Type of business or sector	Research and Development.
Dates	2006 - 2007
Occupation or position held	Post doctoral fellow.
Main activities and responsibilities	Development of a dilution refrigerator using parts described in literature. Most of the available time was used to create a bill of materials, find who produced them and manage to import them to Brazil. During this period I also worked on the maintenance of the lab flux cryostats and of the dilution fridge, plus occasional services in the Helium liquefaction plant.
Name and address of employer	Elisa M. Baggio-Saitovitch, CBPF
Type of business or sector	Research and Development.
Dates	2010 - today
Occupation or position held	Personal project to develop a modular unmanned vehicle control system for scientific purposes.
Main activities and responsibilities	This project was started in 2009 to develop an unmanned vehicle control system for scientific purposes. I wanted to develop not only software but also a reliable hardware which should be capable of handling redundancies of sensors and pilots. The system was made modular to ease hardware upgrades and capability adding. Hardware and software standards were created to the best of my knowledge and are changed only if required by critical problems. A n-body simulator was also adapted to test different control loop configurations for a tricopter system running in a virtual world. PID tunning was tried using genetic algorithms.
Name and address of employer	Myself.
Type of business or sector	Research and development.
Dates	2006 - 2012
Occupation or position held	Teacher.
Main activities and responsibilities	Javascript teaching and project execution teaching at a webdesign latu-sensu graduate course at PUC-Rio.
Name and address of employer	CCE, PUC-Rio, www.puc-rio.br.
Type of business or sector	IT, Webdesign.
Dates	2000 - 2001
Occupation or position held	IT Consultant
Main activities and responsibilities	During this period I developed a solution for TCP/IP traffic control for a cable Internet Service Provider (DirectNET), where a RedHat Linux distribution was reduced to 16MB and customized to control over 250 clients, balancing their traffic equally using a WRR kernel module.
Name and address of employer	DirectNet, São José dos Campos, under supervision of Ernani Souza Reis, ernani.reis@gmail.com.
Type of business or sector	IT.
Dates	1997
Occupation or position held	Visiting student.
Main activities and responsibilities	Here I developed of a way to do electrical poling (recording of high electric fields) on optical fibers that were etched with hydrofluoric acid to reduce their diameter to 10 μm.
Name and address of employer	KTH, Royal Institute of Technology, Stockholm, Sweden, under the supervision of Dr. Walter Margulis. walter.margulis@acreo.se.

Type of business or sector	Research and Development.

Education and Training

Dates	2014-2015
Title of qualification awarded	Licenciate in Physics
Principal subjects/occupational skills covered	Pedagogical training for holders of a bachelor's degree in physics.
Institution	State University of the Valley of the Acarau. http://www.uvanet.br

Dates	2001-2006
Title of qualification awarded	Doctor in Sciences - Physics. Thesis Title: "Pressure-temperature-composition phase diagram of the heavy fermion compound $Ce_2Rh_{1-x}Ir_xIn_8$".
Principal subjects/occupational skills covered	Working with dilution refrigerators (very low temperatures), assembling high pressure cells, dealing with small (0.5mm) samples for electrical resistivity measurements under high pressures.
Institution	Pontifical Catholic University of Rio de Janeiro (PUC-Rio)

Dates	1998-1999
Title of qualification awarded	Master in Sciences - Physics. Thesis title: "Micro optical fiber poling"
Principal subjects/occupational skills covered	Working with hydrofluoric acid and high voltages. Developed the concept of micro optical fibers.
Institution	Pontifical Catholic University of Rio de Janeiro (PUC-Rio)

Dates	1992-1997
Title of qualification awarded	Bachelor in Physics
Principal subjects/occupational skills covered	Developed simulation programs. Worked with cryogenics, lasers, cooling systems, non-linear optics and instrumentation development.
Institution	Pontifical Catholic University of Rio de Janeiro (PUC-Rio)

Personal skills and competences

Mother tongue

Brazilian Portuguese

Self-assessment
European level(*)

	Understanding			Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production		
French	A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user	A1	Basic user
English	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user

(*) *Common European Framework of Reference* (CEF) level

Social skills and competences	Team working, ability to work in an international environment, student tutoring.
Other skills and competences	Scientific instrumentation development, numerical simulations, data acquisition and processing, object oriented programming, optics, lasers, diamond anvil cells, dilution fridges, low temperature instrumentation, basic digital electronics, PCB prototyping, some embedded programming.

Computer science experience

Programming Languages:	C++, C, Perl, Javascript, some SQL, Pascal, Basic.
Other:	TCP/IP, ethernet, wireless networks, network security and linux administration.
Operating systems:	Some linux distibutions, Mac OS.

Developed/in development software

Financial Data Collector	A robot written in C++ to atomate trades on Binance.com using different strategies.
MUVeC	Modular Unmanned Vehicle Controller firmware for MUVec v5 boards, based on AVR microcontroller, and for v6 boards, based on STM32 microcontroller.
Telegram robots	Simple chatbots on Telegram, based on open source libraries, that perform specific tasks to solve specific problems. One of them integrated data from different diamond markets and displayed available diamonds for sale based on a sequence of interative filters.
n-Body simulator	A program made to study and visualize physically interesting cases during university. Recently rewritten C++. It accepts and processes XML files with particle/spring configurations. Now it is used to simulate an unmanned vehicle (tricopter) control system in a virtual world and tune it using genetic algorithms.
Power Adapter Alarm	An app developed in Objective-C, available for sale on App Store for a limited period, that sounded an alarm when the computer was disconnected from its power adapter. It was written to make thieves life harder.
MMS	A system that controlled scientific equipments and acquired data from them using a client server architecture. Originally written in Perl, then upgraded to C++. All the communication tasks between client computer and laboratory servers was done transparently to make the scientific work easier. Open source. Development halted.
Data processing	A set of libraries used to process data from different equipments, searching for best data fit intervals of selected mathematical functions. Development halted.
APSIM	A system that extracted data from the FlightGear flight simulator, fed it to a micro controller through a USB link, used the data to stabilize and pilot the airplane and sent the data back to the flight simulator. Developed as a test bench for the flight controller functions.
CQS	A system, completely developed in Perl, that balanced traffic equally between clients from a cable ISP in São José dos Campos, SP, Brazil.
Camera	A 3D camera library made to plot 3D lines and pixels in a 2D display. Originally made in C, then rewritten to Perl, then again rewritten in C++.
Many CGIs	Made to automate websites. Initially in Perl, but then moved to C++ and further developed.
Some bio informatics essays	A program made to reassemble DNA subsequences. Made in Perl a long time ago.
Other	There are many other small softwares not mentioned here. Programming has always been a hobby for me.

Additional Information

Scholarships

[11-14] Science without Borders (CNPq) post doctoral fellowship 2013. Renewed three times, until Dec. 2014.

[10] National Post-doctoral Program - CAPES-FAPERJ, 2010-2015.

[9] Renewal of Junior Post-doctoral Scholarship, FAPERJ funding agency, 2009.

[8] Renewal of Junior Post-doctoral Scholarship, FAPERJ funding agency, 2008.

[7] Junior Post-doctoral Scholarship, FAPERJ funding agency, 2008.

[6] Renewal of Institutional Training Program Scholarship, CNPq funding agency, 2007.

[5] Institutional Training Program, CNPq funding agency, 2006.

[4] PhD scholarship, CNPq funding agency, 2001.

[3] Graduate Student Stipend, CNPq funding agency, 1998.

[2] PIBIC Scientific Initiation Scholarship, PUC-Rio, 1995.

[1] Scientific Initiation Scholarship, CNPq funding agency, 1994.

Grants

[2] Technological Development grant, FAPERJ funding agency, 2009, R$ 130.000,00.

[1] Startup grant, FAPERJ funding agency, 2008, R$10.000,00.

Developed Research Projects

[6] Development of a control system, initially for an unmanned air vehicle, with scientific purposes. FAPERJ grant type ADT1, 2009.

PhD:

[5] Pressure-temperature-composition phase diagram of the heavy fermion compound $Ce_2Rh_{1-x}Ir_xIn_8$. PhD thesis work developed at PUC-Rio, CBPF and Unicamp, between September 2001 and May 2006.

Masters:

[4] Micro optical fiber poling. Masters thesis work developed at PUC-Rio Optoelectronics lab under advising of Profs. Walter Margulis and Isabel S. Carvalho, between 1998 and 1999.

Undergraduate:

[3] Development of an in fiber optical modulator using standard telecom optical fibers. Developed as a visiting student of the Optics Department of Royal Institute of Technology, Stockholm, Sweden, from January to June 1997, under Prof. Walter Margulis supervision.

[2] The effect of radiation pressure on micro optical fibers. Scientific initiation project developed from 1995 to 1996 in the Optoelectronics Lab of PUC-Rio under supervision of Prof. Walter Margulis.

[1] Development of an automation software for electrical resistivity measurements of high Tc superconductors. Scientific initiation project supervised by Prof. Hortencio A. Borges at the Superconductivity Lab of PUC-Rio.

Teaching Experience

Graduate:

[2] JavaScript programming module, from 2006 to 2012 at Webdesign graduate course (20 hour module / 1 module per year).

[1] Publishing and Management/Project module, from 2006 to 2012 at Webdesign graduate course(20 hour module / 1 module per year).

Undergraduate:

[4] The Cold Side of Physics - Low Temperature Physics, IX CBPF School, 2012.

[3] Physics lab I - Mechanics, from September to November 2003.

[2] Physics lab III - Electromagnetism, from September to November 2001.

[1] Physics for arts lab, from March to June 1998.

High school:

[1] PIUES - School, University and Society Integration Program: experimental physics lectures to high school students, from March 1994 to December 1995.

Scientific Initiation Advisory

[4] Project: **Development of control and stabilization loops for the autonomous scientific platform being developed at CBPF.**
Student: Alan Ferreira Borba (IME).
Period: 2010-2011.
Co-advisor: Dr. Eduardo Novaes Hering.
Advisor: Prof. Henrique Lins de Barros.

[3] Project: **A deep stick type electrical resistivity measurement system with a 1K pot.**
Student: Caio Carvalho (IME).
Period: 2010 - 2011.

[2] Project: **Development of an electronic interface between microcontrollers and the sensors of the flight control system for aerial platforms.**
Student: Benhur Quintino (IME).
Period: 2010 - 2011.
Co-advisor: Prof. Henrique Lins de Barros.

[1] Project: **Development of low temperature instrumentation.**
Student: Giovanna Killer Soares de Souza (IME).
Period: 2009 a 2011.
Co-advisors: Dra Scheilla Maria Ramos da Silva, Dr. Marcos de Castro Carvalho.

PROVOC Advisory

PROVOC: Scientific Vocation Program for High School Students

[3] Project: **Detection of bioelectrical signals in plants.**
Students: Viviane Rodrigues (Pedro II - Caxias), Ana Maria Garcia Lima (Pedro II - Tijuca), Felipe Favrat (Pedro II - Caxias), Helena Oliveira (CAP-UERJ).
Period: 2010 - 2011
Co-advisors: Dr. Scheilla Maria Ramos da Silva, Dr. Marcos de Castro Carvalho.
Status: Concluded. Awarded.

[2] Project: **A device for helping people with visual dificulties.**
Students): Viviane Rodrigues (Pedro II - Caxias), Larissa Jorge da Silva (Pedro II - Realengo).
Period: 2009 - 2010.
Co-advisors: Draa. Scheilla Maria Ramos da Silva, Dr. Marcos de Castro Carvalho.
Status: Concluded. Awarded.

[1] Project: **Characterization of an alien element (Caracterização de um elemento alienígena).**
Students (Alunos): Gabriel (Pedro II - Realengo), Marcos (Pedro II - Realengo), Larissa Jorge da Silva (Pedro II - Realengo).
Period (Período): 2008 - 2009
Co-advisors (Co-orientadores): Dra. Scheilla Maria Ramos da Silva, Dr. Eduardo Novaes Hering.
Advisor (Orientador): Dr. Marcos de Castro Carvalho.
Status: Concluded. Awarded.

Participation in Latu Sensu Judging Commission Boards

[4] Adriana Pontes Alcântara de Souza, Cadastro Cultural - Bases para integração de núcleos de produção artística na Web, em 6 de março de 2007.

[3] Rafael Martins Guimarães, Análise de site de comércio eletrônico da Editora Campos/Elsevier, em 6 de março de 2007.

[2] Tatiana C. Varejão Teixeira, Demonstração da acessibilidade no aprendizado do deficiente visual- TOA: Tutorial Online Acessível, em 6 de março de 2007.

[1] Miguel de Souza Carino, Portfólio: Sua importância para o Webdesigner, em 8 de março de 2007.

Articles in Scientific Journals

[19] COLLAVE, J. R. ; Borges, H. A. ; RAMOS, S. M. ; E.N.HERING ; Fontes, M. B. ; BAGGIO-SAITOVITCH, E. ; Mendonça Ferreira, L. ; BITTAR, E. M. ; PAGLIUSO, P. G. . **Heavy fermion $Ce_3Co_4Sn_{13}$ compound under pressure.** Journal of Applied Physics, v. 117, p. 17E307, 2015.

[18] SHIMIZU, YUSEI ; BRAITHWAITE, DANIEL ; SALCE, BERNARD ; COMBIER, TRISTAN ; AOKI, DAI ; HERING, EDUARDO N. ; RAMOS, SCHEILLA M. ; FLOUQUET, JACQUES . **Unusual strong spin-fluctuation effects around the critical pressure of the itinerant Ising-type ferromagnet URhAl.** Physical Review B, v. 91, p. 125115, 2015.

[17] Ramos, S. M. ; E.N.HERING ; LAPERTOT, G ; WILHELM, F ; ROGALEV, A ; BAUDELET, F ; BRAITHWAITE, D . **XMCD measurements under pressure confirm ferromagnetism in YbCu Si but find none in YbRh Si.** JOURNAL OF PHYSICS. CONFERENCE SERIES (ONLINE), v. 592, p. 012015, 2015.

[16] J.R. Collave, H.A. Borges, S.M. Ramos, E.N. Hering, M.B. Fontes, E. Baggio-Saitovitch, A. Eichler, E.M. Bittar, P.G. Pagliuso, **Electrical resistivity under extreme conditions in the $Ce_3Ir_4Sn_{13}$ heavy fermion compound.** Solid State Communications Volume 177, January 2014, Pages 132–135.

[15] E. N. Hering, S. M. Ramos, **Engarrafamentos.** Revista Ciência Hoje, March 2012.

[14] H. Hidaka, S.M.Ramos, E.N.Hering, M.B.Fontes, E.B.Saitovitch, S.Otani, T.Wakabayashi, Y.Shimizu, T.Yanagisawa, H.Amitsuka. **Effects of Pressure on Cage-Structural Compound $Ce_3Pd_{20}Ge_6$**. J. Phis. Conf. Ser. 391 (2012) 012019.

[13] K Sengupta, M Alzamora, M B Fontes, E V Sampathkumaran, S M Ramos, E N Hering, E M B Saitovitch, P L Paulose, R Ranganathan, Th Doert and J P F Jemetio. **Large variations in the magnetic ordering behavior of $EuCu_2As_2$ with the application of external pressure and magnetic field.** J. Phys.: Condens. Matter 24 (2012).

[12] E.N.Hering, H.Borges, S.M.Ramos, M.B.Fontes, E.Baggio-Saitovich, M.Continentino, E.Bittar, L.Mendonça.Ferreira, R.Lora-Serrano, F.Gandra, C. Adriano, P.G.Pagliuso, N.Moreno, J.Sarrao, J.D.Thompson. **Residual superconducting phases in the disordered Ce2Rh1-xIrxIn8 alloys**. Physical Review. B, Condensed Matter and Materials Physics, v. 82, p. 184517, 2010.

[11] S.M.Ramos, M. Fontes, E.N.Hering, M. Continentino, E. Baggio-Saitovitch, F. Dinola Neto, E. Bittar, P. Pagliuso, E. Bauer, J. Sarrao, J. Thompson. **Superconducting Quantum Critical Point in CeCoIn5-xSnx.** Physical Review Letters 105, 126401, 2010.

[10] E.N. Hering, H.A. Borges, S.M. Ramos, M.B. Fontes, E. Baggio-Saitovich, E.M. Bittar, L. Mendonça Ferreira, R. Lora-Serrano, C. Adriano, P.G. Pagliuso, J.L. Sarrao, and J.D. Thompson. **Two superconducting phases in the bi-layered alloys Ce2Rh1-xIrxIn8.** Physica B - Proceedings of the International Conference on Strongly Correlated Electron Systems, 1 April 2008, 403:780, 2008.

[9] L. Mendonça Ferreira, T. Park, V. Sidorov, M. Nicklas, E. M. Bittar, R. Lora-Serrano, E. N. Hering, S. M. Ramos, M. B. Fontes, E. Baggio-Saitovich, Hanoh Lee, J. L. Sarrao, J. D. Thompson, and P. G. Pagliuso. **Tuning the pressure-induced superconducting phase in doped CeRhIn5.** Physical Review Letters, 101:017005, 2008.

[8] L. Mendonça Ferreira, E.M. Bittar, P.G. Pagliuso, E.N. Hering, S.M. Ramos, H.A. Borges, E. Baggio-Saitovich, E.D. Bauer, J.D. Thompson, and J.L. Sarrao. **Pressure–temperature phase diagrams of in-plane doped CeRhIn5.** Physica C: Superconductivity, 2007.

[7] E.N. Hering, H.A. Borges, S.M. Ramos, M.B. Fontes, E. Baggio Saitovitch, E.M. Bittar, P.G. Pagliuso, N.O. Moreno, J.D. Thompson, and J.L. Sarrao. **Pressure-temperature-composition phase diagram of Ce2MIn8.** Physica B: Condensed Matter, 2006.

[6] A. Polasek, L. A. Saleh, H. A. Borges, E. N. Hering, G. S. Oliveira, E. T. Serra, J. H. G. Lima, and F. Rizzo. **Investigation of PB-free Bi-2223 High Temperature Sintering. IEEE Transactions on Applied Superconductivity, 2005.**

[5] B.A.Marinkovic, S.K.Xia, E.T.Serra, H.A.Borges, E.N.Hering, and F.Rizzo. **Electric Current Supression Mechanisms in Bi-2212 Bulk Obtained by Partial Melt-Processing.** Physica C, 408:34–36, 8 2004.

[4] R.Reyes, E.N.Hering, and M.Cremona. **Growth and Characterization of OLED with samarium complex as emitting and electron transporting layer.** Thin Solid Films, 420:23–29, February 2002.

[3] W.Margulis, F.C.Garcia, E.N.Hering, L.C.Guedes Valente, B.Lesche, F.Laurell, and I.C.S.Carvalho.**Poled Glasses.** MRS Bulletin, 31, February 1998.

[2] F.C.Garcia, I.C.S.Carvalho, E.N.Hering, W.Margulis, and B.Lesche. **Inducing a Large Order Nonlinearity in Soft Glasses by Poling.** Applied Physics Letters, 1998.

[1] B. Lesche, F.C.Garcia, E.N.Hering, W.Margulis, I.C.S.Carvalho, and F.Laurell. **Etching of Silica Glass under Electric Fields.** Physical Review Letters, 1997.

Presentations in Congresses

[10] E.N.Hering, S.M.Ramos, D.Braithwaite, B.Salce, A.Sakai and S.Nakatsuji. **Phase diagram of SmTi2Al20 under pressure.** Bernard Coqblin Memorial Symposium 2013, Orsay, France.

[9] E.N.Hering, F.Badaró, S.M.Ramos, A.Eichler, M.B.Fontes, E.Baggio-Saitovitch. **A server based, multi user, multi experiment, data acquisition and control system with project information integration and a publish button.** Encontro de Física 2011, Foz do Iguaçu.

[8] G.K.S.Souza, E.N.Hering, S.M.Ramos, A.Eichler, M.B.Fontes, E.Baggio-Saitovitch. **Bringing new light into quantum critical phenomena by taking microscopic characterization systems below 1K.** Encontro de Física 2011, Foz do Iguaçu.

[7] E.N.Hering, S.M.Ramos, H.A.Borges, M.B.Fontes, E.Baggio-Saitovitch, E.M.Bittar, C.Adriano, P.G.Pagliuso, N.Moreno, J.D.Thompson, J.L.Sarrao. **Possible Reentrant Superconductivity on the Ce2Rh0.75Ir0.25In8 Heavy Fermion Compound.** X Encontro SBPMat, 2011, Gramado.

[6] E.N.Hering, H.A.Borges, E.Baggio Saitovitch, M.B.Fontes, P.G.Pagliuso, N.O.Moreno, J.D.Thompson e J.L. Sarrao. **Supercondutividade no diagrama de fases (pressão, temperatura e composição) do composto férmion pesado Ce2MIn8 (M=Rh, Ir)**. Em XXIX Encontro Nacional de Fısica da Matéria Condensada, São Lourenço, MG, Brasil, 2006.

[5] E. N. Hering, H. A. Borges, S. M. R. Silva, M. B. Fontes, E. M. B. Saitovitch, P. G. Pagliuso, N.O. Moreno, and J.L. Sarrao. **Pressure-temperature-composition phase diagram of Ce2MIn8 (M = Rh, Ir).** Em XXVIII Encontro Nacional de Fısica da Matéria Condensada, Santos, São Paulo, Brasil, 2005.

[4] E.N.Hering, I.C.S.Carvalho, L.C.G.Valente e W.Margulis. **Polarização de microfibras para modulação eletroóptica.** Em XXII Encontro Nacional de Fısica da Matéria Condensada, São Lourenço, MG, Brasil, 1999.

[3] E.N.Hering, I.C.S.Carvalho, A. Salles, C.M.B.Cordeiro, C.J.S.Matos, L.C.G.Valente e W.Margulis. **Title.** Em XXI Encontro Nacional de Fısica da Matéria Condensada, Caxambu, MG, Brasil, 1998.

[2] E.N.Hering, F.C.Garcia, I.C.S.Carvalho, and W.Margulis. **O efeito da pressão de radiação em micro-fibras ópticas.** In IV Jornada de Iniciação Cientifica - PIBIC, PUC-Rio, 1996.

[1] E.N.Hering, F.C.Garcia, I.C.S.Carvalho, and W.Margulis. **Desenvolvimento de dispositivos opticos utilizando microfibras.** In III Jornada de Iniciação Científica - PIBIC, PUC-Rio, 1995.

Co-author on Presentations in Congresses

[23] H.Hidaka, T.Wakabayashi, S.Otani, T.Yanagisawa, H.Amitsuka, S.M.Ramos, E.N.Hering, M.B.Fontes, E.Baggio-Saitovitch. Effects of Pressure on Cage-Structural Compound $Ce_3Pd_{20}Ge_6$. Encontro de Física 2011, Foz do Iguaçu.

[22] H.Hidaka, S.Otani, T.Yanagisawa, H.Amitsuka, S.M.Ramos, E.NHering, E.Baggio-Saitovitch. **Effects of Pressure on Clathrate $Ce_3Pd_{20}Ge_6$.** X Encontro SBPMat, Gramado, 2011.

[21] H.Hidaka, S.Otani, T.Wakabayashi, T. Yanagisawa, S.M.Ramos, E.N.Hering, M.B.Fontes, E.Baggio-Saitovitch. **Effects of Pressure on Clathrate $Ce_3Pd_{20}Ge_6$.** From Blue Pigment to Green Energy, Cobalt mines - Skutterudites – Thermoelectrics, 2011, Skuterud, Norway, 2011.

[20] J.R.C.Garcia, H.A.Borges, S.M.Ramos, E.N.Hering, M.B.Fontes, E.Baggio-Saitovitch, P.G.Pagliuso. **Study of electrical resistivity under high pressures of compound $Ce_3Ir_4Sn_{13}$.** X Encontro SBPMat, 2011.

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Schools, Congresses and Workshops attended

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[13] SCES 2014 - International Conference on Strongly Correlated Electron Systems, Grenoble, FR, 2014.

[12] BCMS 2013 - Bernhard Coqblin Memorial 2013

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[10] Brazilian Workshop on Magnetization Dynamics, 2010, CBPF, Rio de Janeiro, Brasil.

[9] O papel das controvérsias no desenvolvimento das ciências, CBPF, Rio de Janeiro, 2009.

[8] DAAD School on Fundamentals and Materials for Novel Sensors, 2009, Rio de Janeiro, Brasil.

[7] 3rd I2CAM-FAPERJ, School on Soft Condensed Matter Physics, 2009, Rio de Janeiro, Brasil.

[6] SCES 2008 - International Conference on Strongly Correlated Electron Systems„ Buzios, Rio de Janeiro, Brasil.

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[2] Segundo Workshop de Tecnologia NanoAeroespacial, 2006, São José dos Campos, SP, Brasil.

[1] Primeira Escola de Óptica Aplicada, Insituto de Física da USP, São Paulo, Brasil.

Participation on Organization of Events

[3] International Conference on Strongly Correlated Electron Systems - SCES 2014, Grenoble, France, Local Committee.

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