Curriculum Vitae Summary
Eric RIUS

Personal data

Professor of Electronics (63th CNU section), University of Brest, since **2005. 50th** years old
Lab-STICC, UMR CNRS 6285. **U**niversity of **Brest** (**U.B.O**)
Eric.Rius@univ-brest.fr Web: http://www.lab-sticc.fr/

Research interests

Communication systems**, Microwave** passive devices, **Microwave filters, Sensors**.

Education

12/12/2003 **Peer-accreditation to Supervise Research Works in E**lectronics, University of Brest (U.B.O). "Study of planar filters in the centimetric and millimetric frequency domains. Contribution to performance enhancement ".

6/12/1994 **PhD Thesis in** Electronics. University of Brest (U.B.O) "Modeling of the uniplanar technology by the finite-difference method. Application to couplers and filters".

Supervision

Supervision of twenty four PhD students: nineteen of them have already defended their respective thesis and got positions at either the Polytechnic Institute of Toulouse, the University of Brest, the University of Rennes, The University of Bogotta or in companies ThalesAleniaSpace, ThalesCommunication, Elliptika, Actris, Jacquelot, TRW … ; the research works by the last five PhD students are still in progress.

Christophe Hallet *PhD-defense expected by the end of **2018**.*
PhD subject: " *Etude et réalisation de filtres Matriochka" pour des applications spatiales*"
Funding: PhD studentship funded by **CNES** & Brest Métropole
***Advisers**: Jean François Favennec, **Eric Rius**,*

Denis LE GOFF *PhD-defense expected by the end of **2017**.*
PhD subject: "*COC/COP smart microsystems for radiofrequency and microwave applications*"
Funding: PhD studentship by the French Ministry of Higher Education and Research
Advisers: **Eric Rius**, Philippe Coquet, Supervisors: Yves Querre, Azar Maalouf, Edwin Teo
*The work will be shared between the lab-STICC at Brest and **CINTRA lab** at **Nanyang Technological University** at Singapore (by 18-month period).*

Sarra ABEDRRABBA *PhD-defense expected by the end of **2017**.*
PhD subject: "*Advanced Technologies for Millimeterwave Integrated filters in Q and V bands*"
Funding: under **ANR** ATOMIQ contract
Adviser: **Eric Rius**, Supervisors: Benjamin Potelon, Azar Maalouf

Luc FOURNITON *PhD-defense expected by the end of **2017**.*
PhD subject: "*Miniature L&S -Band Filters in LTCC HIGH K Technology*"
Funding: PhD studentship funded by **DGA** & **DSTL**
Partnership between the Lab-STICC and the **University of Cranfield** (UK)
Advisers: C. Person, **Eric Rius**, Supervisors: Y. Quéré, Alessio Balleri

Rubén GUERRERO *PhD-defense expected in may of **2016**.*
PhD subject: "*Miniature L&S -Band Filters in LTCC HIGH K Technology*"
Funding: PhD studentship co-funded by **CNES/ThalèsAléniaSpace**
Adviser: **Eric Rius**, Supervisors: Benjamin Potelon
Main contributions: 1 papers submitted at JNM 2015 (Bordeaux)

Co-supervisor of **3 Post doctoral** researchers.

Primary **Supervision** and Co-supervision of **16 Master-degree** students.

Administrative experience:

2011-till now **Head of Electronics Department** at the University of Brest.
(31 people: 8 full Professors - 14 Associate professors - administrative and technical staff 9)
http://www.univ-brest.fr/electronique

2012-till now **Head & co-founder** with Yves Quéré of **Cursus Master Ingénierie STIC (CMI)** at the University of Brest. Since 2012 the University of Brest, belongs to a French network of 21 university able to deliver the excellence label CMI
www. figure-network.org

Since 2014 **Group Leader** with Ammar Sharaiha **of a research team/topic on "Microwave devices and multi-physical interfaces" within the Lab-STICC**.
(64 people: 11 full Professors - 24 Associate professors - 30 PhD and postdoctoral Students)
http://www.lab-sticc.fr/

2008-2012 **Head of the Lab-STICC "Microwave filtering" Team** composed of 5 academics**,** 9 PhD students, 3 postdoctoral students. At the origin of the activity structuration **Since 2001**.

Under contract activities

Since 2001 **Supervisor of** the design of planar-, multilayer-, supraconductor-, LTCC- filters for space applications in C-, Ku- and Ka-bands; several R&T contracts and provisions of service for **CNES** and **Thales Alenia Space** (Toulouse).
More than 15 years, of a strong investissement in space activities.

2009-2012 Main **Coordinator of** the **ANR RF-IDROFIL contract**. **"**MicRoFluIDic MillimetRic Sensors and Tunable ResOnators and FILters", Partners: Lab-STICC, LAAS**. labelized** by the French "**Images & Réseaux**" and "Aérospace Valley" **competitive clusters**.

2012-2016 Main **Coordinator of** the **ANR/DGA COCORICO contract**. **"**Cyclo Olefin Polymer (CO)-polymer (COC/COP) for the design of millimetric wireless components and associated autonomous sensors", Partner: Lab-STICC**. labelized** by the French "**Images & Réseaux**" **competitive cluster**.

2011-2014 **Involved** in the **DGA RAPID: FENDER contract**. **"**Filtres passE baNDE accoRdables en technologie "substrate integrated waveguide"", Partners: Lab-STICC, Elliptika**.**

2014-2017 **In charge for** Lab-STICC of the **ANR (INFRA) ATOMIQ contract "**Advanced Technologies fOr Millimeterwave Integrated filters in Q and V bands"; Partners: Lab- STICC, XLIM, TFP, TAS, CNES, SPCTS, 3DCERAM**. Labelized** by the French "**Images & Réseaux" competitive cluster**.

2013-2015 **Involved** in the **ITP-MCM** (**I**NNOVATION and **T**ECHNOLOGY **P**ARTNERSHIP for **M**aterials and **C**omponents for **M**issiles: Radio-Frequency Seekers) **PYRANA & COBRA (French-UK) contracts**. "3D conformal Polymer Antennas (Pyrana)" & "3D antennas and Additive Technologies (Cobra)", Partners: Lab-STICC, Thales TOSA, MDBA (Fr et Uk), DGA & DSTL**.**

2013-2015 **Coordinator** with Yves Quéré of the **SAD COMCLEEN contract**. **"**COMposants RF 3D : performanCe et déveLoppEmENt durables - 3D RF Devices : efficiency and sustainable development", Sole partner: Lab-STICC**. Funded by the Britanny Region.**

2015-2018 **Involved** in the **DGA RAPID: Matriochka contract**. **"**Filtre miniature accordable basé sur un nouveau concept de résonateur coaxial à air; "MATRIOCHKA"", Partners: Lab-STICC, Elliptika, Thales Communication, Airbus Defence & Space**.**

2015-2018 **Coordinator** with Jean François Favennec of the **CNES R&T contract**. **"**Etude et réalisation de filtres à résonateurs "Matriochka" pour des applications de navigation (bande L) et de télémesure TM/TC (bande X)" Sole partner: Lab-STICC. ThalesAleniaSpace End User**.**

Outstanding contributions

2014 With 2 other projects, **2 projects leaded by the team**, **FENDER** (leader Jean François Favennec) & **COCORICO** (leader Eric Rius) have been **selected by the DGA**, to represent the thematic "Electronics Components" at the DGA Innovation Forum (Ecole Polytechnique 2014).

2013-2016 **Appointed by EuMA, for European Microwave Lecturer**, for 3 years.
"Design of planar Ceramic filters, Microstrip and Substrate Integrated Waveguide Solutions, for Space Applications".

2011 4 months at Nanyang Technological University (**Singapore**)

2010-2011 Guest Editor EuMA International Journal of Microwave and Wireless Technologies, Cambridge University Press, Special Issue on EuMW 2010 (**IJWMT**)….

2010 **TPC Chair** at European Microwave Conference (EuMc), Paris

2008 **Co-Founder** of the Elliptika Spin-off www.elliptika.com

Publications and Talks

Author, or co-author, of about 200 papers and more than one 1580 citations.

Main Papers **H index: 19** source **Google Scholar**

"Theoretical and experimental study of various types of compensated dielectric bridges for millimeter-wave coplanar applications" **E. Rius**, J. P. Coupez, S. Toutain, C. Person, P. Legaud, IEEE Transactions on Microwave Theory and Techniques, Vol. 48, n°1, January **2000**, p. 152-155. cited by **17**, source **Google Scholar**.

"Narrow Bandpass Filters Using Dual Behavior Resonators (DBRs)". C. Quendo, **E. Rius**, C. Person, IEEE Transactions on Microwave Theory and Techniques, Vol. 51, n°3, March **2003**. cited by **212**, source **Google Scholar**.

"Wide- and Narrow-Band Band-Pass Coplanar Filters in the W-Frequency Band ". **E. Rius**, G. Prigent, H. Happy, G. Dambrine, S. Boret, A. Cappy , IEEE Transactions on Microwave Theory and Techniques, Vol. 51, n°3, March **2003**.
cited by **33**, source **Google Scholar**.

"Narrow bandpass filters using dual beavior resonators (DBRs) based on stepped impedance stubs and differents-length stubs ". C. Quendo, **E. Rius**, C. Person, IEEE Transactions on Microwave Theory and Techniques, Vol. 52, n°3, March **2004**.
cited by **127**, source **Google Scholar**.

"Fabrication and characterization of low loss TFMS on silicon substrate up to 220 GHz". G. Six, G. Prigent, **E. Rius**, G. Dambrine, H. Happy, IEEE Transactions on Microwave Theory and Techniques, **Vol. 54, n°1, January** 2005.
cited by 38, source **Google Scholar.**