



Universidad de Oviedo  
*Universidá d'Uviéu*  
*University of Oviedo*

# Curriculum Vitae and Scientific Activities

Virginia SELGAS

February 5, 2024

---

## PERSONAL DATA

---

NAME: Selgas Buznego, Virginia  
NATIONALITY: Spanish  
DATE OF BIRTH: January 25, 1979  
CURRENT ADDRESS: Departamento de Matemáticas, Escuela Politécnica de Ingeniería de Gijón.  
C/Luis Ortiz Berrocal s/n, 33203 Gijón, Asturias, Spain.  
PHONE: +34 985 18 22 96  
E-MAIL: selgasvirginia@uniovi.es  
WEB PAGE: virginiaselgas.com

---

## EDUCATION AND POSITIONS

---

### ACADEMIC TITLES

| <u>ACADEMIC TITLE</u>   | <u>UNIVERSITY</u>                | <u>DATE</u>        |
|---|----------------------------------|--------------------|
| Bachelor in Mathematics,<br>speciality <i>Applied Mathematics and Computation</i> | Universidad de Oviedo<br>(Spain) | September 03, 2001 |

### DOCTORAL PROGRAM

|   |   |                    |
|---|---|--------------------|
| <i>Numerical methods for pde's<br/>with applications in Engineering</i> | Universidad de Santiago<br>de Compostela (Spain)    | September 29, 2003 |
| ADVISORS:   | S. Meddahi (U. Oviedo),<br>P. Salgado (U. Santiago) |                    |

### PHD IN MATHEMATICS

|  |                                  |                   |
|--|----------------------------------|-------------------|
| <i>Mathematical and numerical analysis<br/>of quasi-static Maxwell's equations</i> | Universidad de Oviedo<br>(Spain) | February 17, 2006 |
| PHD ADVISOR:   | S. Meddahi (U. Oviedo)           |                   |

### ACADEMIC HONORS

ORGANISM: Ministerio de Educación y Ciencia (Spain)  
GRANT: Beca de Colaboración  
TITLE: Trabajo Académicamente Dirigido *Aplicaciones del Álgebra a la teoría de códigos*  
ADVISOR: Consuelo Martínez (Universidad de Oviedo, Spain)  
DATES: Academic year 2000-2001

ORGANISM: Ministerio de Educación y Ciencia (Spain)  
GRANT: National program *Formación de Profesorado Universitario*  
DATES: April 01, 2002 - January 11, 2006

ORGANISM: Universidad de Oviedo (Spain) & Andersen Consulting  
PRIZE: Premio Fin de Carrera de Matemáticas  
DATE: 2001

ORGANISM: Universidad de Oviedo (Spain)  
PRIZE: Premio de Licenciatura de Matemáticas 2001-2002  
TITLE: Tesis de Licenciatura *Cálculo de ondas acústicas en un medio infinito no homogéneo*  
ADVISORS: Salim Meddahi, Antonio Márquez (Universidad de Oviedo, Spain)  
DATE: 2003

## POSITIONS

| <u>POSITION</u>   | <u>UNIVERSITY</u>                   | <u>DATES</u>   |
|---|-------------------------------------|--|
| Tenured Associate Professor <i>civil servant</i><br>(Profesor Titular de Universidad) | Universidad de Oviedo<br>(Spain)    | Since July 27, 2018  |
| Temporary Associate Professor<br>(Profesor Contratado Dr. Interino)                   | Universidad de Oviedo<br>(Spain)    | From September 01, 2016<br>To - , 2018                     |
| Assistant Professor<br>(Profesor Ayudante Doctor)                                     | Universidad de Oviedo<br>(Spain)    | From September 01, 2011<br>To August 31, 2016              |
| Tenured Associate Professor <i>non-civil servant</i><br>(Profesor Contratado Doctor)  | Universidad de La Coruña<br>(Spain) | Since October 14, 2008<br>(On leave since August 31, 2011) |
| Teaching Assistant<br>(Profesor Ayudante LOU)   | Universidad de La Coruña<br>(Spain) | From October 04, 2006<br>To October 10, 2008               |
| Teaching Assistant<br>(Profesor Ayudante LOU)   | Universidad de Oviedo<br>(Spain)    | From January 12, 2006<br>To September 30, 2006             |
| Instructor<br>(Becaria FPU, MEC)  | Universidad de Oviedo<br>(Spain)    | From January 01, 2003<br>To January 11, 2006               |

## AWARDS AND HONORS

ORGANISM: Sociedad Española de Matemática Aplicada  
AWARD: Best article SeMAJournal 2014 for  
*Variational views of stokeslets and stresslets* (with F.J. Sayas)  
DATE: 2015

## **EDITORIAL WORK**

Refereeing for:

- SIAM Journals on Applied Mathematics (SIAP) in 2011, 2014, 2018; on Numerical Analysis (SINUM) in 2016; and on Mathematical Analysis (SIMA) in 2016, 2021.
- Inverse Problems (IP) in 2011, 2012, 2013, 2015, 2017, 2019, 2020.
- Applied Numerical Mathematics (APNUM) in 2013, 2014.
- Computers and Mathematics with Applications (CAMWA) in 2017.
- Acta Acoustica united with Acustica (Acta Acust united Ac) in 2017.
- Applied Mathematics and Computation (AMC) in 2017, 2020.
- Inverse Problems and Imaging (IPI) in 2018, 2020.
- Journal of Applied Analysis (Appl Anal) in 2018.
- Journal of Applicable Analysis (GAPA) in 2020.
- International Journal for Numerical Methods in Engineering (IJNME) in 2018, 2019.
- International Journal of Computer Mathematics (GCOM) in 2020.
- Engineering Analysis with Boundary Elements (EABE) in 2020.
- Inverse Problems in Science & Engineering (GIPE) in 2020.
- Journal Of Computational Physics (JCOMP) in 2020.
- Mathematical Methods in the Applied Science (MMA) in 2020.
- SeMA Journal (SEMJ) in 2021.

## **LANGUAGES**

Spanish. Mother tongue.

English. Read, write and speak fluently. Certificate C1 (Escuela Oficial de Idiomas 2016).

Italian. Elementary knowledge.

---

---

## PUBLICATIONS

---

### RESEARCH INTERESTS

Numerical Analysis and Numerical Simulation of partial differential equations, especially in the following areas:

- finite and boundary elements combination;
- computational electromagnetism;
- qualitative methods in inverse scattering;
- cross-diffusion systems in population dynamics.

### PUBLICATIONS IN REFEREED JOURNALS

- AUTHORS: S. Meddahi – V. Selgas  
TITLE: A mixed-FEM and BEM coupling for a three-dimensional eddy current problem  
JOURNAL: *M2AN Math. Model. Numer. Anal.*  
VOLUME: 37 (2)                      PAGES: 291–318                      YEAR: 2003
- AUTHORS: S. Meddahi – A. Márquez – V. Selgas  
TITLE: Computing acoustic waves in an inhomogeneous medium of the plane by a coupling of spectral and finite elements  
JOURNAL: *SIAM J. Numer. Anal.*  
VOLUME: 41 (5)                      PAGES: 1729–1750                      YEAR: 2003
- AUTHORS: S. Meddahi – A. Márquez – V. Selgas  
TITLE: A new BEM-FEM coupling strategy for two-dimensional fluid-solid interaction problems  
JOURNAL: *Journal of Computational Physics*  
VOLUME: 199                      PAGES: 205–220                      YEAR: 2004
- AUTHORS: P. Salgado – V. Selgas  
TITLE: A symmetric BEM-FEM coupling for the three dimensional magnetostatic problem using scalar potentials  
JOURNAL: *Engineering Analysis with Boundary Elements*  
VOLUME: 32/8                      PAGES: 633–644                      YEAR: 2008
- AUTHORS: S. Meddahi – V. Selgas  
TITLE: An H-based formulation for a time dependent eddy current problem  
JOURNAL: *Applied Numerical Mathematics*  
VOLUME: 58                      PAGES: 1061–1083                      YEAR: 2008
- AUTHORS: P. Monk – V. Selgas  
TITLE: An inverse fluid-solid interaction problem  
JOURNAL: *Inverse Problems and Imaging*  
VOLUME: 3 (2)                      PAGES: 173–198                      YEAR: 2009
- AUTHORS: S. Meddahi – F.J. Sayas – V. Selgas  
TITLE: Non-symmetric coupling of BEM and mixed FEM on polyhedral interfaces  
JOURNAL: *Mathematics of Computation*  
VOLUME: 80 (273)                      PAGES: 43–68                      YEAR: 2011
- AUTHORS: P. Monk – V. Selgas  
TITLE: Near field sampling type methods for the inverse fluid-solid interaction problem  
JOURNAL: *Inverse Problems and Imaging*  
VOLUME: 5                      PAGES: 465–483                      YEAR: 2011

- AUTHORS: P. Monk – V. Selgas  
 TITLE: Sampling type methods for an inverse waveguide problem  
 JOURNAL: *Inverse Problems and Imaging*  
 VOLUME: 6 (4) PAGES: 709–747 YEAR: 2012
- AUTHORS: P. Monk – V. Selgas  
 TITLE: Transmission eigenvalues for dielectric objects on a perfect conductor  
 JOURNAL: *Inverse Problems*  
 VOLUME: 29 PAGES: 104007 YEAR: 2013
- AUTHORS: F.J. Sayas – V. Selgas  
 TITLE: Variational views of stokeslets and stresslets  
 JOURNAL: *SeMA Journal*  
 VOLUME: 63 PAGES: 65–90 YEAR: 2014
- AUTHORS: G. Galiano – V. Selgas  
 TITLE: On a cross-diffusion segregation problem arising from a model of interacting particles  
 JOURNAL: *Nonlinear Analysis. Real World Applications*  
 VOLUME: 18 PAGES: 34–49 YEAR: 2014
- AUTHORS: V. Selgas  
 TITLE: A symmetric BEM–FEM method for an axisymmetric eddy current problem  
 JOURNAL: *Applied Numerical Mathematics*  
 VOLUME: 79 PAGES: 107–123 YEAR: 2014
- AUTHORS: G. Galiano – V. Selgas  
 TITLE: Deterministic particle method approximation of a contact inhibition cross-diffusion problem  
 JOURNAL: *Applied Numerical Mathematics*  
 VOLUME: 95 PAGES: 229–237 YEAR: 2015
- AUTHORS: G. Galiano – V. Selgas  
 TITLE: Analysis of a splitting-differentiation population model leading to cross-diffusion  
 JOURNAL: *Computers & Mathematics with Applications*  
 VOLUME: 70(12) PAGES: 2933–2945 YEAR: 2015
- AUTHORS: L. Fan – P. Monk – V. Selgas  
 TITLE: Time dependent scattering in an acoustic waveguide via convolution quadrature and the Dirichlet-to-Neumann map  
 JOURNAL: *Trends in Differential Equations and Applications (SEMA-SIMAI Springer Series)*  
 VOLUME: 8 PAGES: 321–337 YEAR: 2016
- AUTHORS: P. Monk – V. Selgas  
 TITLE: An inverse acoustic waveguide problem in the time domain  
 JOURNAL: *Inverse Problems*  
 VOLUME: 32 PAGES: 055001 YEAR: 2016
- AUTHORS: A. Carpio – T.G. Dimiduk – M.L. Rapún – V. Selgas  
 TITLE: Noninvasive imaging of 3D micro and nanostructures by topological methods  
 JOURNAL: *SIAM Journal on Imaging Sciences*  
 VOLUME: 9(3) PAGES: 1324–1354 YEAR: 2016
- AUTHORS: M. González – V. Selgas  
 TITLE: Analysis of a velocity-stress-pressure formulation for a fluid-structure interaction problem  
 JOURNAL: *Applied Numerical Mathematics*  
 VOLUME: 123 PAGES: 275–299 YEAR: 2018

- AUTHORS: A. Carpio – T.G. Dimiduk – V. Selgas – P. Vidal  
 TITLE: Optimization methods for in-line holography  
 JOURNAL: *SIAM Journal on Imaging Sciences*  
 VOLUME: 11(2) PAGES: 923-956 YEAR: 2018
- AUTHORS: S. Kapita – P. Monk – V. Selgas  
 TITLE: A Trefftz discontinuous Galerkin method for time-harmonic waves with a generalized impedance boundary condition  
 JOURNAL: *Applicable Analysis*  
 VOLUME: 99(3) PAGES: 1-28 YEAR: 2018
- AUTHORS: P. Monk – V. Selgas – F. Yang  
 TITLE: Near field linear sampling method for an inverse problem in an electromagnetic waveguide  
 JOURNAL: *Inverse Problems*  
 VOLUME: 35 PAGES: 065001 YEAR: 2019
- AUTHORS: F. Cakoni – P. Monk – V. Selgas  
 TITLE: Analysis of the linear sampling method for imaging penetrable obstacles in the time domain  
 JOURNAL: *Analysis & PDE*  
 VOLUME: 14-3 PAGES: 667–688 YEAR: 2021
- AUTHORS: M. Levitin – P. Monk – V. Selgas  
 TITLE: Impedance eigenvalues in linear elasticity  
 JOURNAL: *SIAM Journal on Applied Mathematics*  
 VOLUME: 81(6) PAGES: 2433–2456 YEAR: 2021
- AUTHORS: P. Monk – V. Selgas  
 TITLE: Modified transmission eigenvalues for inverse scattering in a fluid-solid interaction problem  
 JOURNAL: *Research in the Mathematical Sciences*  
 VOLUME: 9(3) YEAR: 2022
- AUTHORS: T. Laivaara – P. Monk – V. Selgas  
 TITLE: The time domain linear sampling method for determining the shape of multiple scatterers using electromagnetic waves  
 JOURNAL: *Computational Methods in Applied Mathematics*.  
 VOLUME: 22(4) PAGES: 889–913 YEAR: 2022
- AUTHORS: M. Pena – P. Monk – V. Selgas  
 TITLE: Multi-frequency linear sampling method on experimental data sets  
 JOURNAL: *IEEE Transactions on Antennas and Propagation*  
 VOLUME: 71(11) PAGES: 8788–8798 YEAR: 2023

#### **PUBLICATIONS WITH LIMITED DIFFUSION**

- AUTHOR: V. Selgas  
 TITLE: PhD Thesis in CD format  
*Analisis matematico y numerico de las ecuaciones de Maxwell cuasiestaticas* (Spanish)  
 EDITORIAL: Servicio de Publicaciones, Universidad de Oviedo (Spain)  
 REFERENCE: ISBN: 84-8317-589-4  
 YEAR: 2006

---

## RESEARCH FUNDING

---

### RESEARCH GRANTS

PROJECT TITLE: *Ecuaciones en derivadas parciales y modelos matemáticos de medios continuos*  
FUNDER: Ministerio de Ciencia y Tecnología (Spain)  
PRINCIPAL INVESTIGATOR: Sergei Schmarev  
REFERENCE: MEC-04-MTM-05417  
DATES: January 1, 2002 - December 14, 2007

FUNDER: Ministerio de Educación y Ciencia (Spain)  
PROJECT TITLE: *Métodos matemáticos y numéricos para modelos de ecuaciones en derivadas parciales no lineales y acopladas en finanzas, mecánica y medio ambiente*  
PRINCIPAL INVESTIGATOR: Carlos Vázquez Cendón  
REFERENCE: MTM2007-67596-C02-01  
DATES: December 01, 2007 - November 30, 2010

FUNDER: Consellería de Innovación e Industria, Xunta de Galicia (Spain)  
PROJECT TITLE: *Análisis matemático y simulación numérica para problemas acústicos: reducción de ruido emitido y acústica en flujos*  
PRINCIPAL INVESTIGATOR: Luis Hervella Nieto  
REFERENCE: PGIDIT07PXIB105257PR  
DATES: November 01, 2007 - October 31, 2010

PROJECT TITLE: *Modelos, análisis matemático y resolución numérica de algunos problemas en ciencia e ingeniería basados en EDPs*  
FUNDER: Ministerio de Ciencia e Innovación (Spain)  
PRINCIPAL INVESTIGATOR: Carlos Vázquez Cendón  
REFERENCE: MTM2010-21135-C02-01  
DATES: January 01, 2011 - December 31, 2014

PROJECT TITLE: *Estudio analítico y numérico de algunos modelos de la mecánica de medios continuos, dinámica de poblaciones y procesamiento de imágenes*  
FUNDER: Ministerio de Economía y Competitividad (Spain)  
PRINCIPAL INVESTIGATORS: Salim Meddahi Bouras, Gonzalo Galiano Casas  
REFERENCE: MTM2013-43671-P  
DATES: January 01, 2014 - December 31, 2017

PROJECT TITLE: *Análisis matemático y numérico de modelos de la mecánica de medios continuos, el electromagnetismo y la teoría de la señal*  
FUNDER: Ministerio de Economía, Industria y Competitividad (Spain)  
PRINCIPAL INVESTIGATORS: Salim Meddahi Bouras, Gonzalo Galiano Casas  
REFERENCE: MTM2017-87162-P  
DATES: January 01, 2018 - December 31, 2021

PROJECT TITLE: *Ecuaciones en derivadas parciales y modelos de la mecánica de medios continuos*  
FUNDER: Ministerio de Ciencia e Innovación (Spain)  
PRINCIPAL INVESTIGATORS: Sergey Shmarev, Gonzalo Galiano Casas  
REFERENCE: MCI-21-PID2020-116287GB-I00  
DATES: Since September 01, 2021



## GRANTS FOR THE CONSOLIDATION OF RESEARCH GROUPS

PROJECT TITLE: Red Mathematica COMPUTING & CONSULTING, Galicia (Spain)  
FUNDER: Xunta de Galicia (Spain)  
PRINCIPAL INVESTIGATOR: Wenceslao González Manteiga  
REFERENCE: Exp. 95/2006  
DATES: January 01, 2006 - December 31, 2008

PROJECT TITLE: Red gallega de cálculo de altas prestaciones (Spain)  
FUNDER: Xunta de Galicia (Spain)  
PRINCIPAL INVESTIGATOR: Ramón Doallo Biempica  
REFERENCE: Exp. 2007/147  
DATES: January 1, 2008 - December 31, 2010

---

---

## PRESENTATIONS AND SEMINARS

---

### INVITED PRESENTATIONS

AUTHORS: P. Monk, V. Selgas  
TITLE: The linear sampling method for a near or far field inverse fluid–structure interaction problem  
WORKSHOP: Special Trimester on Inverse Problems  
VENUE: A Coruña (Spain)  
YEAR: 2011

AUTHORS: P. Salgado, V. Selgas  
TITLE: A symmetric bem–fem method for an axisymmetric eddy current problem  
WORKSHOP: *Workshop on Numerical Electromagnetics and Industrial Applications NELIA 2011*  
VENUE: Santiago de Compostela (Spain)  
YEAR: 2011

AUTHORS: P. Monk, V. Selgas  
TITLE: Transmission eigenvalues for a dielectric object resting on a perfect conductor  
CONFERENCE: *Fluid dynamics and electromagnetism: theory and numerical approximation*  
VENUE: Trento (Italy)  
YEAR: 2014

AUTHORS: P. Monk, V. Selgas  
TITLE: *Sampling type methods for an inverse wave guide problem posed in the frequency domain or in the time domain*  
WORKSHOP: Numerical Resolution for Inverse Problems II  
VENUE: BCAM (Bilbao, Spain)  
YEAR: 2016

AUTHORS: P. Monk, V. Selgas  
TITLE: An inverse problem for a waveguide in the frequency and the time domains  
WORKSHOP: Oberwolfach Workshop *Theory and Numerics of Inverse Scattering Problems*  
VENUE: Mathematical Research Institute of Oberwolfach (Germany)  
YEAR: 2016

AUTHORS: P. Monk, F. Cakoni, V. Selgas  
TITLE: An overview of the linear sampling method in the time domain and its analysis for imaging penetrable obstacles  
WORKSHOP: *Numerical Analysis and Regularization for Inverse Problems*  
VENUE: University College of London (London, U.K.)  
YEAR: 2018

AUTHORS: M. Levitin, P. Monk, V. Selgas  
TITLE: Characterization of targets using modified transmission eigenvalues for a fluid-solid interaction problem  
WORKSHOP: *Zaragoza Numérica*  
VENUE: University of Zaragoza (Zaragoza, Spain)  
YEAR: 2022

---

## CONTRIBUTED PRESENTATIONS

- AUTHORS: S. Meddahi, A. Márquez, V. Selgas  
TITLE: A coupling of spectral and finite elements for an acoustic scattering problem  
CONFERENCE: *WAVES 2003*  
PUBLICATION: Proceedings *Mathematical and numerical aspects of wave propagation*, Springer, 280–286  
VENUE: Jyväskylä (Finland)  
YEAR: 2003
- AUTHORS: S. Meddahi, A. Márquez, V. Selgas  
TITLE: A coupling of spectral and finite elements for an acoustic scattering problem in the plane  
CONFERENCE: *CEDYA 2003*  
PUBLICATION: Proceedings *XVIII CEDYA, VIII CMA*, 205–206  
VENUE: Tarragona (Spain)  
YEAR: 2003
- AUTHORS: S. Meddahi, A. Márquez, V. Selgas  
TITLE: Un acoplamiento BEM-FEM para un problema bidimensional de interacción fluido-sólido (Spanish)  
CONFERENCE: *CEDYA 2003*  
PUBLICATION: Proceedings *XVIII CEDYA, VIII CMA*, 201–202  
VENUE: Tarragona (Spain)  
YEAR: 2003
- AUTHORS: S. Meddahi, V. Selgas  
TITLE: A mixed-BEM and FEM coupling for a three-dimensional eddy current problem  
CONFERENCE: *III International conference on boundary integral methods: theory and applications*  
VENUE: Reading (United Kingdom)  
YEAR: 2004
- AUTHORS: S. Meddahi, V. Selgas  
TITLE: A BEM-FEM formulation for a time dependent eddy current problem  
CONFERENCE: *VI European conference on numerical mathematics and advanced applications*  
PUBLICATION: Proceedings, Springer  
VENUE: Santiago de Compostela (Spain)  
YEAR: 2005
- AUTHORS: S. Meddahi, V. Selgas  
TÍTULO: Análisis matemático y numérico de las ecuaciones de Maxwell cuasiestáticas (Spanish)  
CONFERENCE: *XIX CEDYA – IX CMA*  
PUBLICATION: Proceedings in CD format, ISBN 84-689-7726-8  
VENUE: Leganés (Spain)  
YEAR: 2005
- AUTHORS: P. Salgado, V. Selgas  
TITLE: Analysis of a symmetric BEM-FEM method for the 3d magnetostatic problem using scalar potentials  
CONFERENCE: *WCCM8 –ECCOMAS 2008*  
VENUE: Venice (Italy)  
YEAR: 2008

AUTHORS: P. Monk, V. Selgas  
 TITLE: An inverse fluid–solid interaction problem  
 CONFERENCE: *WAVES 2009*  
 VENUE: Pau (France)  
 YEAR: 2009

AUTHORS: P. Monk, V. Selgas  
 TITLE: Un problema inverso de interacción fluido–sólido (Spanish)  
 CONFERENCE: *XXI CEDYA – XI CMA*  
 PUBLICATION: Proceedings in CD format (ISBN 84-692-6473-7)  
 VENUE: Ciudad Real (Spain)  
 YEAR: 2009

AUTHORS: P. Monk, V. Selgas  
 TITLE: Near field sampling type methods for an inverse fluid-solid interaction problem  
 CONFERENCE: *PICOF'10*  
 VENUE: Cartagena (Spain)  
 YEAR: 2010

AUTHORS: P. Monk, V. Selgas  
 TITLE: Linear sampling and reciprocity gap methods for a fluid solid interaction problem in the near field  
 CONFERENCE: *ICNAAM 2011*  
 VENUE: Halkidiki (Greece)  
 YEAR: 2011

AUTHORS: M. Glez. Taboada, V. Selgas  
 TITLE: A new numerical scheme for a linear fluid–structure interaction problem  
 CONFERENCE: *COUPLED PROBLEMS 2011*  
 VENUE: Kos (Greece)  
 YEAR: 2011

AUTHORS: M. Glez. Taboada, V. Selgas  
 TITLE: Un método numérico nuevo para un problema de interacción fluido–sólido lineal (Spanish)  
 CONFERENCE: *XXII CEDYA / XII CMA*  
 PUBLICATION: Proceedings, 170  
 VENUE: Palma de Mallorca (Spain)  
 YEAR: 2011

AUTHORS: P. Monk, V. Selgas  
 TITLE: Linear sampling and reciprocity gap methods for an inverse waveguide problem  
 CONGRESO: *PICOF'12*  
 VENUE: Paris (France)  
 YEAR: 2012

AUTHORS: P. Salgado, V. Selgas  
 TITLE: Approximation of eddy currents in an axisymmetric unbounded domain  
 CONFERENCE: *MAFELAP 2013*. Conference on the Mathematics of Finite Elements and Applications  
 VENUE: Brunel (United Kingdom)  
 YEAR: 2013

AUTHORS: P. Monk, V. Selgas  
 TITLE: Transmission eigenvalues for a dielectric object resting on a perfect conductor  
 CONFERENCE: *ECMI 2014*. 18th European Conference on Mathematics for Industry  
 VENUE: Taormina (Italy)  
 YEAR: 2014

AUTHORS: P. Monk, V. Selgas  
 TITLE: A transmission eigenvalue problem with mixed boundary conditions for Maxwell's equations in half space  
 CONFERENCE: *AIP 2015*. Applied Inverse Problems conference 2015  
 VENUE: Helsinki (Finland)  
 YEAR: 2015

AUTHORS: P. Monk, V. Selgas  
 TITLE: A time domain Linear Sampling Method for a wave guide  
 CONFERENCE: *XXIV CEDYA - XIV CMA*.  
 VENUE: Cádiz (Spain)  
 YEAR: 2015

AUTHORS: G. Galiano, V. Selgas  
 TITLE: Analysis of a splitting-differentiation population model leading to cross-diffusion  
 CONFERENCE: *ECMI 2016*. 19th European Conference on Mathematics for Industry  
 VENUE: Santiago de Compostela (Spain)  
 YEAR: 2016

AUTHORS: P. Monk, V. Selgas  
 TITLE: A time domain Linear Sampling Method for a waveguide  
 CONFERENCE: *International Conference on Computational Mathematics and Inverse Problems 2nd Kliakhandler Conference*  
 VENUE: Houghton MI (USA)  
 YEAR: 2016

AUTHORS: G. Galiano, V. Selgas  
 TITLE: Analysis of a process of splitting-differentiation leading to cross-diffusion  
 CONFERENCE: *XXV CEDYA - XV CMA*  
 VENUE: Cartagena (Spain)  
 YEAR: 2017

AUTHORS: F. Cakoni, P. Monk, V. Selgas  
 TITLE: Analysis of the time domain linear sampling method for imaging penetrable scatterers  
 CONFERENCE: *II Joint Meeting RSME-SEMA-SBM-SBMAC*  
 VENUE: Cádiz (Spain)  
 YEAR: 2018

- AUTHORS: M. Levitin, P. Monk, V. Selgas  
 TITLE: Eigenvalues in inverse scattering for a fluid–solid interaction  
 CONFERENCE: *9th International Congress on Industrial and Applied Mathematics*  
 VENUE: Valencia (Spain)  
 YEAR: 2019
- AUTHORS: P. Monk, V. Selgas  
 TITLE: The time domain linear sampling method for Maxwell’s equations with an impedance boundary condition  
 CONFERENCE: *XXVI CEDYA - XVI CMA*  
 VENUE: Gijón (Spain)  
 YEAR: 2021
- AUTHORS: M. Levitin, P. Monk, V. Selgas  
 TITLE: Steklov and modified interior transmission eigenvalues as target signatures in an inverse fluid–solid interaction problem  
 CONFERENCE: *XXVI CEDYA - XVI CMA*  
 VENUE: Gijón (Spain)  
 YEAR: 2021
- AUTHORS: T. Läivaara, P. Monk, V. Selgas  
 TITLE: El método de muestreo lineal para las ecuaciones de Maxwell en régimen de evolución  
 CONFERENCE: *Congreso Bienal RSME*  
 VENUE: Ciudad Real (Spain)  
 YEAR: 2022
- AUTHORS: T. Läivaara, P. Monk, V. Selgas  
 TITLE: Imaging electromagnetic scatterers in the time domain  
 CONFERENCE: *XXVI CEDYA - XVI CMA*  
 VENUE: Zaragoza (Spain)  
 YEAR: 2022
- AUTHORS: P. Monk, V. Selgas  
 TITLE: A new family of modified interior transmission eigenvalues for inverse fluid-solid interaction problem  
 CONFERENCE: *AIP 2023*  
 VENUE: Göttingen (Germany)  
 YEAR: 2023
- AUTHORS: P. Monk, M. Pena, V. Selgas  
 TITLE: Numerical simulation of wave propagation in a waveguide using Trefftz elements  
 CONFERENCE: *WONAPDE 2024*  
 VENUE: Concepción (Chile)  
 YEAR: 2024
- AUTHORS: P. Monk, M. Pena, V. Selgas  
 TITLE: A Trefftz Discontinuous Galerkin method for the time-harmonic wave propagation in a waveguide  
 CONFERENCE: *Bienal Real Sociedad Matemática Española 2024*  
 VENUE: Pamplona (Spain)  
 YEAR: 2024

## SEMINAR TALKS

- UNIVERSITY: Universidad de A Coruña  
TITLE: *Análisis matemático y numérico de las ecuaciones de Maxwell cuasiestáticas* (Spanish)  
VENUE: La Coruña (Spain) YEAR: 2006
- UNIVERSITY: University of Delaware (Newark DE, U.S.A.)  
TITLE: *Analysis of a symmetric BEM-FEM method for the 3d magnetostatic problem using scalar potentials*  
VENUE: Newark DE (U.S.A.) YEAR: 2007
- UNIVERSITY: University of Delaware (Newark DE, U.S.A.)  
TITLE: *Non-symmetric coupling of mixed FEM and BEM on polyhedral surfaces*  
VENUE: Newark DE (U.S.A.) YEAR: 2009
- UNIVERSITY: University of Delaware (Newark DE, U.S.A.)  
TITLE: *A BEM-FEM method for an axisymmetric eddy currents problem*  
VENUE: Newark DE (U.S.A.) YEAR: 2012
- UNIVERSITY: University of Delaware (Newark DE, U.S.A.)  
TITLE: *Approximation of eddy currents in an axisymmetric unbounded domain*  
VENUE: Newark DE (U.S.A.) YEAR: 2013
- UNIVERSITY: University of Delaware (Newark DE, U.S.A.)  
TITLE: *Linear sampling techniques for an inverse wave guide problem posed in the frequency or the time domain*  
VENUE: Newark DE (U.S.A.) YEAR: 2016
- UNIVERSITY: Universidad de Sevilla (Sevilla, Spain)  
TITLE: *Estudio de un modelo de desdoblamiento de una población con o sin diferenciación*  
VENUE: Departamento de Ecuaciones Diferenciales y Análisis Numérico (EDAN), Instituto de Investigación en Matemáticas de la Universidad de Sevilla (IMUS) Sevilla (Spain) YEAR: 2017
- AUTHORS: M. Levitin, P. Monk, V. Selgas  
TITLE: *Autovalores de transmisión interna modificados para un problema inverso de interacción fluido-estructura*  
MEETING: Seminars of the Department of Applied Mathematics  
VENUE: Online for the University of Santiago de Compostela (Spain)  
YEAR: 2023

## CONTRIBUTED POSTERS

- AUTORES: S. Meddahi, V. Selgas  
TITLE: *Combinación de FEM mixtos-BEM para un problema de eddy currents* (Spanish)  
CONFERENCE: *XI Escuela hispano-francesa*  
VENUE: Cádiz (Spain)  
YEAR: 2004
- AUTHORS: P. Monk, V. Selgas  
TITLE: *Transmission eigenvalues for dielectric objects on a perfect conductor*  
CONFERENCE: *International Conference on Novel Directions in Inverse Scattering 2013.*  
VENUE: Newark (Delaware, U.S.A.)  
YEAR: 2013

---

## RESEARCH ACTIVITIES

---

### BOARDS

Executive Committee of the Spanish Society of Applied Mathematics  
*Sociedad Española de Matemática Aplicada (SEMA)*

YEAR: since June 2023

### ORGANIZATION OF MEETINGS

Course *XIV Escuela de Otoño Hispano Francesa Jacques–Louis Lions sobre Simulación Numérica en Física e Ingeniería*

ORGANIZERS: Sociedad Española de Matemática Aplicada (SEMA),  
Institut National de Recherche en Informatique et Automatique (INRIA)

VENUE: La Coruña (Spain)

YEAR: 2010

Course *XVII Escuela de Otoño Hispano Francesa Jacques–Louis Lions sobre Simulación Numérica en Física e Ingeniería*

ORGANIZERS: Sociedad Española de Matemática Aplicada (SEMA),  
Institut National de Recherche en Informatique et Automatique (INRIA)

VENUE: Gijón (Spain)

YEAR: 2016

Conference *XXVI CEDYA - XVI CMA*

ORGANIZERS: Sociedad Española de Matemática Aplicada (SEMA)

VENUE: Gijón (Spain)

YEAR: 2021



## SCHOLARSHIPS AND VISITING POSITIONS

### **Predocctoral scholarships**

PLACE: Dipartimento di Matematica, Università degli Studi di Trento (Trento, Italy)  
FUNDING: Ministerio de Educación y Ciencia (through the Program for FPU grants, Spain)  
DATES: October 02, 2003 - January 02, 2004  
May 04, 2004 - July 23, 2004

### **Postdoctoral scholarships**

PLACE: Department of Mathematical Sciences, University of Delaware (Newark DE, U.S.A.)  
FUNDING: Program INCITE, Xunta de Galicia (Spain) in 2007/2008,  
Project MTM2007-67596-C02-01, Ministerio de Educación y Ciencia (Spain) in 2009  
Project FA9550-21135-C02-01, US-AFSR (USA) in 2012  
Project of Campus of International Excellence, Universidad de Oviedo (Spain) from 2013 to 2018  
DATES: - November 14, 2007 - January 31, 2008  
- January 26, 2009 - February 26, 2009  
- April 16, 2012 - April 25, 2012  
- February 06, 2013 - March 06, 2013  
- April 30, 2014 - May 30, 2014  
- July 17, 2017 - August 24, 2017  
- July 30, 2018 - September 14, 2018

PLACE: Department of Mathematics, Brunel University (London, U.K.)  
FUNDING: Project MTM2010-21135-C02-01, Ministerio de Ciencia e Innovación (Spain)  
DATES: March 20, 2011 - March 25, 2011  
June 06, 2011 - June 10, 2011

PLACE: Departamento de Fundamentos Matemáticos, ETSI Aeronáuticos  
Universidad Politécnica de Madrid (Madrid, Spain)  
FUNDING: Project FIS2011-28838-C02-02, Ministerio de Ciencia e Innovación (Spain)  
DATES: July 01, 2013 - July 05, 2013  
April 22, 2014 - April 25, 2014

PLACE: Department of Mathematics, University of Rutgers (New Brunswick NJ, U.S.A.)  
FUNDING: Project MTM2013-43671-P, Ministerio de Economía y Competitividad (Spain)  
DATES: February 15th, 2016 - March 30, 2016

PLACE: Departamento de Matemática Aplicada, Facultad de Matemáticas  
Universidad Complutense de Madrid (Madrid, Spain)  
FUNDING: Project MTM2013-43671-P, Ministerio de Economía y Competitividad (Spain)  
DATES: January 09, 2013 - January 13, 2017

PLACE: Departamento de Ecuaciones Diferenciales y Análisis Numérico (EDAN)  
and Instituto de Investigación en Matemáticas (IMUS)  
Universidad de Sevilla (Seville, Spain)  
FUNDING: IMUS' fundings  
DATES: May 28, 2017 - June 02, 2017

## ATTENDANCE TO COURSES

*Escuela de Matemáticas Lluís Santaló*  
ORGANIZER: Universidad Internacional Menéndez Pelayo  
VENUE: Santander (Spain)  
YEAR: 2002

*X Escuela de Otoño Hispano Francesa sobre Simulación Numérica en Física e Ingeniería*  
ORGANIZERS: Sociedad Española de Matemática Aplicada (SEMA),  
Institut National de Recherche en Informatique et Automatique (INRIA)  
VENUE: Jaca (Spain)  
YEAR: 2002

*XI Escuela de Otoño Hispano Francesa sobre Simulación Numérica en Física e Ingeniería*  
ORGANIZERS: Sociedad Española de Matemática Aplicada (SEMA),  
Institut National de Recherche en Informatique et Automatique (INRIA)  
VENUE: Cádiz (Spain)  
YEAR: 2004

*Zaragoza Numérica: Curso y encuentro de análisis numérico*  
ORGANIZER: Universidad de Zaragoza  
VENUE: Zaragoza  
YEAR: 2005

*Zaragoza Numérica: Curso y encuentro de análisis numérico*  
ORGANIZER: Universidad de Zaragoza  
VENUE: Zaragoza  
YEAR: 2007

*II Curso intensivo i-Math de software libre orientado a ciencias e ingeniería: Course Programación en Python orientado a la ingeniería*  
ORGANIZERS: i-Math, Universidad de A Coruña  
VENUE: La Coruña (Spain)  
YEAR: 2009

*Course i-Math short course on numerical electromagnetism and industrial applications*  
ORGANIZERS: i-Math, Universidad de Santiago de Compostela  
VENUE: Santiago de Compostela (Spain)  
YEAR: 2010

*Course i-Math summer school on mathematical modeling and numerical simulation of the cardiovascular system*  
ORGANIZERS: i-Math, Universidad de A Coruña  
VENUE: La Coruña (Spain)  
YEAR: 2010

*XIV Escuela de Otoño Hispano Francesa Jacques–Louis Lions sobre Simulación Numérica en Física e Ingeniería*  
ORGANIZERS: Sociedad Española de Matemática Aplicada (SEMA),  
Institut National de Recherche en Informatique et Automatique (INRIA)  
VENUE: La Coruña (Spain)  
YEAR: 2010

*III Jornadas de Consulta Matemática para empresas e instituciones*  
ORGANIZERS: i-Math, Universidad de Santiago de Compostela, Universidad de Vigo  
VENUE: Santiago de Compostela (Spain)  
YEAR: 2010

- ORGANIZER: Course *Iniciación al paquete estadístico R*  
 Unidad de Consultoría Estadística (Universidad de Oviedo)  
 VENUE: Gijón (Spain)  
 YEAR: 2012
- ORGANIZER: Course *Topics in computational electromagnetism*  
 by A. Valli from Università degli Studi di Trento (Italy)  
 Departamento de Matemática Aplicada, Universidad de Santiago de Compostela  
 VENUE: Santiago de Compostela (Spain)  
 YEAR: 2013
- ORGANIZER: Course *On the approximation of multiphysics problems*  
 by A. Quarteroni from École Polytechnique Fédérale de Lausanne (Switzerland)  
 and Politecnico di Milano (Italy)  
 Departamento de Matemática Aplicada, Universidad de Santiago de Compostela  
 VENUE: Santiago de Compostela (Spain)  
 YEAR: 2013
- ORGANIZER: Course *Cómo elaborar y redactar un proyecto de investigación en ciencias  
 de la computación e informática*  
 Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Gijón (Spain)  
 YEAR: 2013
- ORGANIZER: Course *Edición de imágenes digitales para la docencia y la investigación  
 a través de software libre*  
 Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Oviedo (Spain)  
 YEAR: 2013
- ORGANIZER: Course *Introducción a la programación de dispositivos móviles con Android*  
 Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Gijón (Spain)  
 YEAR: 2014
- ORGANIZER: Course *Quién cita mis artículos y dónde publicarlos:  
 Web of Science, Journal Citation Reports y otros recursos de calidad*  
 Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Oviedo (Spain)  
 YEAR: 2014
- ORGANIZERS: *XVII Escuela de Otoño Hispano Francesa Jacques-Louis Lions sobre  
 Simulación Numérica en Física e Ingeniería*  
 Sociedad Española de Matemática Aplicada (SEMA),  
 Institut National de Recherche en Informatique et Automatique (INRIA)  
 VENUE: Gijón (Spain)  
 YEAR: 2016
- ORGANIZERS: Course *El arte de hablar en público: cómo presentar y defender  
 una comunicación científica en inglés*  
 Campus Digital Compartido del Grupo 9 de Universidades  
 VENUE: Online  
 YEAR: 2021

## **RECOGNITION OF RESEARCH ACTIVITY**

3 positive six-year evaluation (2003–2008, 2009–2014, 2015–2021), by the Spanish evaluation agency *Comisión Nacional Evaluadora de la Actividad Investigadora* (Spain).

---

---

## TEACHING

---

### UNDERGRADUATE COURSES

Undergraduate courses taught at the Universidad de La Coruña (Spain) between 2006 and 2011.

- Course *Cálculo* (School of Engineering). Fall'2006, Fall'2006, Fall'2007, Fall'2008, Fall'2009, Fall'2010.
- Course *Computación Numérica* (School of Engineering). Spring'2007, Spring'2008, Spring'2009, Spring'2010, Spring'2011.
- Course *Lógica Matemática* (School of Teaching). 2009-2010, 2010-2011.

Undergraduate courses taught at the Universidad de Oviedo (Spain).

- Course *Análisis Numérico III* (School of Mathematics), Assistant: Spring'2003, Spring'2004, Spring'2005.
- Course *Análisis I* (School of Mathematics), Spring'2006.
- Course *Análisis Matemático* (School of Physics), Spring'2006.
- Course *Ecuaciones Diferenciales Ordinarias* (School of Physics), Spring'2006.
- Course *Aspectos prácticos sobre la resolución numérica de problemas de la física matemática* (School of Mathematics and Physics). Assistant: Spring'2003, Spring'2004, Spring'2005.
- Course *Cálculo* (School of Engineering EPIG). Fall'2011, Fall'2016.
- Course *Álgebra Lineal* (School of Engineering EPIG). Fall'2011.
- Course *Linear Algebra* (in English, School of Engineering EPIG). Fall'2012, Fall'2013, Fall'2014, Fall'2015, Fall'2019, Fall'2020, Fall'2021.
- Course *Métodos Numéricos* (School of Engineering EPIG). Spring'2017, Spring'2018.
- Course *Numerical Methods* (in English, School of Engineering EPIG). Spring'2022.
- Course *Numerical Methods* (in English, School of Engineering EPM). Spring'2017, Spring'2018.
- Course *Linear Algebra* (in English, School of Engineering EPM). Fall'2017, Fall'2018.
- Course *Advanced Calculus* (in English, School of Engineering EPIG). Spring'2020, Spring'2021.

### GRADUATE COURSES

Master course taught at the Universidad de La Coruña (Spain).

- Course *Introducción al método de elementos de contorno* (from Universidad de A Coruña, followed at Universidad de Santiago de Compostela and Universidad de Vigo through videoconference). Springs from 2007 until 2016.

Other activities.

- Reviewer in the Doctoral Programme in Applied Sciences with major in Mathematical Engineering, Universidad de Concepción (Chile) in 2017.
- Tribunal of the doctoral thesis *Numerical resolution of Fokker-Plank type kinetic equations* (N. Jumaniyazov) in Universidad de Santiago de Compostela (Spain) in 2017.
- Tribunal of the doctoral thesis *Análisis teórico y numérico de problemas diferenciales con quimiotaxis repulsiva* (D.A. Rueda) in Universidad de Sevilla (Spain) in 2018.

## ATTENDANCE TO COURSES

*Programa de formación para la docencia universitaria:*

Course *Técnicas de aprendizaje cooperativo*

ORGANIZER: Instituto de ciencias de la educación (Universidad de Oviedo)

VENUE: Oviedo (Spain)

YEAR: 2006

*Plano de Apoio ao Ensino:*

Course *Estratexias metodolóxicas na aula universitaria*

ORGANIZER: Centro universitario de formación e innovación educativa (Universidad de La Coruña)

VENUE: A Coruña (Spain)

YEAR: 2008

*Plano de Apoio ao Ensino:*

Course *Técnicas de relaxación e saúde*

ORGANIZER: Centro universitario de formación e innovación educativa (Universidad de La Coruña)

VENUE: A Coruña (Spain)

YEAR: 2008

*Plano de Apoio ao Ensino:*

Course *Técnicas para falar en público orientadas á pronunciación de comunicacións e conferencias*

ORGANIZER: Centro universitario de formación e innovación educativa (Universidad de La Coruña)

VENUE: A Coruña (Spain)

YEAR: 2008

*Plano de Apoio ao Ensino:*

Course *Concepción da titoría no ensino universitario*

ORGANIZER: Centro universitario de formación e innovación educativa (Universidad de La Coruña)

VENUE: A Coruña (Spain)

YEAR: 2011

Course *Cómo utilizar el Campus Virtual en la Universidad de Oviedo: Nivel avanzado*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)

VENUE: Oviedo (Spain)

YEARS: 2011, 2012

Course *Aplicación integral de TIC para la impartición de asignaturas con apoyo de aulas informáticas*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)

VENUE: Gijón (Spain)

YEAR: 2012

Course *SEBSCO. Una experiencia alternativa para evaluar competencias*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)

VENUE: Oviedo (Spain)

YEAR: 2012

Course *Software libre en la actividad académica universitaria*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)

VENUE: Gijón (Spain)

YEAR: 2012

Course *La pizarra digital*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)

VENUE: Gijón (Spain)

YEAR: 2012

- Course *Medios, técnicas e instrumentos para la evaluación del aprendizaje en competencias*  
 ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Oviedo (Spain)  
 YEAR: 2012
- Course *Cómo manejar la nueva versión de la plataforma del Campus Virtual de la Universidad de Oviedo*  
 ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Gijón (Spain)  
 YEAR: 2012
- Course *Curso preparatorio para las pruebas de inglés IELTS (nivel B2)*  
 ORGANIZER: Casa de las Lenguas (Universidad de Oviedo)  
 VENUE: Gijón (Spain)  
 YEAR: 2012
- Course *Evaluación objetiva del alumnado. Enfoques, métodos y técnicas*  
 ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Gijón (Spain)  
 YEAR: 2013
- Course *Cómo planificar una tutoría grupal. Algunos ejemplos prácticos*  
 ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Oviedo (Spain)  
 YEAR: 2014
- [2ex] Course *La mentoría entre iguales como estrategia de orientación en la universidad Metodología y procesos*  
 ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Gijón (Spain)  
 YEAR: 2014
- Course *Revisión de los procesos de acceso y admisión a estudios de Grado universitarios*  
 ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Oviedo (Spain)  
 YEAR: 2015
- Course *Normativa sobre evaluación de los estudiantes universitarios*  
 ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Oviedo (Spain)  
 YEAR: 2015
- Course *Cómo utilizar el Campus Virtual de la Universidad de Oviedo. Curso Complementario*  
 ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: Oviedo (Spain)  
 YEAR: 2015
- Course *Educación Digital Inclusiva: Diseño de Contenidos y Recursos Accesibles*  
 ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
 VENUE: *Online*  
 YEAR: 2017

Course *Combinando el uso de MaLab, OneDrive y Campus Virtual en las Prácticas de Laboratorio*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
VENUE: Gijón  
YEAR: 2019

Course *Generación de exámenes con preguntas aleatorias a partir de plantillas (II ed)*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
VENUE: *Online*  
YEAR: 2020

Course *Autoformación para adaptar la docencia a los entornos mixtos Áreas científico-técnicas (nivel inicial)*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
VENUE: *Online*  
YEAR: 2020

Course *Autoformación para la adaptación a la evaluación no presencial (I ed)*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
VENUE: *Online*  
YEAR: 2020

Course *Campus Virtual de la Universidad de Oviedo. Nivel Inicial*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
VENUE: *Online*  
YEAR: 2020

Course *Campus Virtual de la Universidad de Oviedo. Nivel Avanzado*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
VENUE: *Online*  
YEAR: 2020

Course *El arte de hablar en público: cómo presentar y defender una comunicación científica en inglés*

ORGANIZER: Campus Digital Compartido del Grupo 9 de Universidades  
VENUE: *Online*  
YEAR: 2021

Course *Creación de gráficos vectoriales con software libre INKSCAPE*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
VENUE: *Online*  
YEAR: 2022

Course *Herramientas para la tutela de Trabajos de Fin de Grado (TFG)*

ORGANIZER: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
VENUE: *Online*  
YEAR: 2022

Seminar *Tus estudiantes usan ChatGPT y lo sabes*

ORGANIZER: Campus Digital Compartido del Grupo 9 de Universidades  
VENUE: *Online*  
YEAR: 2023



ORGANIZER: Course *LaTeX fundamental para la edición de documentos académicos*  
VENUE: Campus Digital Compartido del Grupo 9 de Universidades  
YEAR: *Online*  
2023

ORGANIZER: Course *Evaluación del aprendizaje en prácticas: MATLAB grader y MS-Teams*  
VENUE: Instituto de Ciencias de la Educación (Universidad de Oviedo)  
YEAR: *Online*  
2023

---

## TEACHING GRANTS

PROGRAM: Project for teaching innovation  
V Convocatoria de Contratos Programa para el Diseño Estratégico  
y la Innovación Docente (Universidad de La Coruña, Spain)  
COURSE: Elementos de contorno  
ACADEMIC YEAR: 2009–2010

PROGRAM: Project for teaching innovation  
Convocatoria 2020 de Proyectos de Innovación docente  
PINN-20-B-018 (Universidad de Oviedo, Spain)  
TITLE: Flashcards como herramienta de microaprendizaje para el estudio  
de conceptos matemáticos II  
ACADEMIC YEAR: 2020–2021

## RECOGNITION OF TEACHING ACTIVITY

2 positive five-year evaluation (2002–2007 and 2007–2012), by the Galician evaluation agency *Agencia de Calidad del Sistema Universitario Gallego* (Spain).

---