

INTERNATIONAL PASCAL CONGRESS



3–7 July 2023, Salamanca

www.pascalcongress.com

Organized by



**VNiVERSiDAD
D SALAMANCA**



Sponsored by



Fast Reports

Table of Contents

Scope.....	2
What is the IPC 2023?	3
Organization	3
Activities	4
Locations	4
Monday, 3 rd July (1/2).....	6
Monday, 3 rd July (2/2).....	7
Tuesday, 4 th July (1/2).....	8
Tuesday, 4 th July (2/2).....	9
Wednesday 5 th , July (1/2)	10
Wednesday 5 th , July (2/2)	11
Thursday 6 th , July (1/2)	12
Thursday 6 th , July (2/2)	13
Friday 7 th , July (1/2)	14
Friday 7 th , July (2/2)	15
Plenary speakers and Instructors.....	16
Niklaus Wirth Awards	19
Assistance and insurance	20
Electricity.....	20
Currency, Banks, and Tipping.....	20

Scope

- The International Pascal Congress (IPC) is an international forum dedicated to bringing together the different players in the software industry whose technologies are based on the Pascal family of programming languages. The IPC 2023 will be held from 3 to 7 July 2023, hosted by the University of Salamanca in Spain, and it will be a stunning and forward-looking reflection on the Pascal family of languages in the software industry.
- Since its inception, the Pascal programming language has been widely adopted in the business and academic computing worlds, giving rise to an entire family of programming languages. The most important of these languages today is Object Pascal, which is used by worldwide both large and small software development companies to create applications for all platforms and operating systems.
- The Pascal programming language was created by Professor Niklaus Wirth in 1970. Professor Wirth designed it to be a small, efficient language intended to encourage good programming practices using structured programming and data structuring. The language's name was chosen in honour of the French mathematician, philosopher and physicist Blaise Pascal.
- Currently the Pascal community is mainly concentrated around two development tools: Delphi, a commercial tool, and Lazarus, a free software project. Both tools are used around the world in free, commercial and academic projects. However, Delphi and Lazarus are merely the visible face of a much larger ecosystem of companies that supply components for these platforms and libraries being developed in open-source projects that extend the capabilities of these two development environments. Moreover, Delphi and Lazarus are not the only tools that use the Pascal language to create computer programs – there are others that use the language to create video games or to program the control of industrial processes.
- The IPC aims to bring together software developers, software industry companies, researchers and Pascal family language enthusiasts in a forum to allow the Pascal community to update their knowledge, create synergies and discuss the future of the Pascal community.

What is the IPC 2023?

- IPC 2023 will be the world's largest and most influential event on Pascal technologies. Internationally recognized speakers will attend to share their knowledge with the event's attendees.
- IPC 2023 is a forum for software companies to showcase new Pascal-related technologies for the development of tomorrow's applications.
- IPC 2023 is where pioneers, decision-makers and industry giants can come together to showcase innovative products, demonstrate new technologies and share inspiring thought leadership.
- IPC 2023 is the perfect opportunity to network with all the technology players in the Pascal world and accelerate a product, business, or idea. Companies, foundations, and independent developers will attend, as well as researchers, students, and computer science enthusiasts, so all together we can illuminate the potential of our digital world.

Organization

The event's organizing committee is composed of

- Dr. Sergio Miguel Tomé (director)
- Dr. Ángel Luis Sánchez (coordinator)

The IPC Academic Committee is composed of

- Prof. Juan Manuel Corchado Rodríguez
- Prof. María Navelonga Moreno García
- Dra. Sara Rodríguez González
- Dr. José Antonio Castellanos Garzón
- Dr. José Rafael García-Bermejo Giner

Activities

IPC 2023 will offer a variety of activities with the objectives of updating and enhancing attendees' knowledge of programming and providing an encouraging environment to empower the Pascal community. The goal is to foster the development of new ideas and technological collaborations among the community members. IPC 2023 activities include the following:

- Plenary sessions
- Advanced programming courses
- Niklaus Wirth Award
- Scientific presentations
- Presentations on commercial technologies
- Presentations on open-source projects
- Presentations on software factory technologies
- Gala dinners and social meetings

Each attendee will receive 30 hours of professional education activities, distributed as 6 hours per day for each of the 5 conference days.

Locations

[Facultad de Geografía e Historia](#)

[Facultad de Traducción e Interpretación](#)

[Facultad de Ciencias](#)

[Hospedería Fonseca](#)

[Irish Theater](#)

[Plaza Mayor](#)

Monday, 3rd July (1/2)

- 10:20 am -10:45am **Registration**

Location: Facultad de Geografía e Historia/ Faculty of Geography and History
Room: Salón de Actos/ Assembly Hall

- 10:45 am- 11:15am **Opening Ceremony- Niklaus Wirth Award ceremony**

Location: Facultad de Geografía e Historia/ Faculty of Geography and History
Room: Salón de Actos/ Assembly Hall

- "Pascal, then and now"
Dr. José Rafael García-Bermejo Giner

- 11:15 am- 12:15 pm **Niklaus Wirth Award Lecture**

Location: Facultad de Geografía e Historia/ Faculty of Geography and History
Room: Salón de Actos/ Assembly Hall

Title: "A Personal View of the History of Pascal and Delphi"
Laureate: Marco Cantù

- 12:20 pm -13:20 pm **Plenary Talk I**

Location: Facultad de Geografía e Historia/ Faculty of Geography and History
Room: Salón de Actos/ Assembly Hall

Keynote speaker: Dr. Johannes W. Dietrich

Title: "Systems Endocrinology – Shaping an Emerging Medical Discipline with Object Pascal"

Summary: Contemporary endocrinology faces five challenges: Reliable diagnosis of hormonal disorders, optimising therapy for minimum immediate metabolic risk, adjusted treatment for reduced long-term cardiovascular hazard, improving quality of life of affected patients and, in endocrine neoplasia, optimised therapy for reduced risk of recurrence. The advent of novel methods for mathematical modelling, advanced computer simulations and approaches from systems biology laid the foundation for an innovative research framework that provides physiological insights and fundamentals for medical decision-making. This transition to systems endocrinology is paving the way to predictive, preventive, personalised and participatory (P4) medicine for patients suffering from highly prevalent metabolic diseases.

The evolution of this new field was only possible with the simultaneous development of reliable high-performance software for simulation and medical applications. Object Pascal provides a reasonable combination of secure programming, cross-platform compatibility and performance, thereby benefitting this endeavour, which is supported by Pascal-based class libraries for life sciences and computational endocrinology, including CyberUnits, PUMA and QUANTUM SALIS.

Monday, 3rd July (2/2)

- 15:20pm -16:20pm **Scientific Presentations**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: Aula de Grados
Chair: Dr. Sergio Miguel Tomé Co-Chair: Dr. Johannes W. Dietrich
 1. "BIOSIM4: PORT FROM C++ TO FREE PASCAL"
Uwe Schächterle
 2. "Optimizing CNNs first layer with respect to color encoding"
Dr. João Paulo Schwarz Schüler
 3. "CyberUnits Bricks: An open class library for simulating nonlinear feedback loops in living systems"
Dr. Johannes W. Dietrich
- 15:20pm -16:20pm **Open Projects I**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: Aula Sun
Title: Lazarus (Behind the Scenes)
Instructor: Mattias Gaertner
- 16:25 – 17:25 **Course: Deploying and using cloud solutions with Delphi.**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Antonio Zapater
- 16:25 – 17:25 **Course: Developing games using Castle Game Engine.**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: E1
Instructor: Michalis Kamburelis
- 17:30 - 18:35 **Course: Developing advanced Client/Server applications with Pascal**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Emilio Pérez
- 18:40 – 19:40 **Course: An introduction to deep learning with CAI NEURAL API**

Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Dr. Joao Paulo Schwarz Schuler
- 20:00 **Having a drink.**
Location: Plaza Mayor

Description: Anyone who wants to can join to us and sit on a terrace in the Plaza Mayor and relax with a drink.

Tuesday, 4th July (1/2)

- 10:00 am -11:00 am **Plenary Talk II**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Marcò Cantù

Title: "Delphi's Object Pascal Evolution"

Summary: This session will cover the current status of Delphi's Object Pascal compiler, including an overview of modern Object Pascal features currently in the language and all of the changes done over recent years. The session will also offer a roundup of the various compilers available in Delphi today, the target platforms and the few differences among them. Finally, there will be some discussion of possible future plans for the language.

- 11:05 am -12:05 am **Plenary Talk III**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Primož Gabrijelčič

Title: "Parallel programming in Pascal: How we should stop focusing on threads and start writing functional code"

Summary: For many Pascal programmers, the topic of parallel programming starts and stops with "write a thread, run a thread". There are better ways to approach this problem, as the rest of the world has already noticed, and we should finally accept that we are no longer living in the nineties and that we should start writing parallel code that focuses on solving some problem and not-as many of us do-on solving problems that arise from improper use of the multithreading paradigm.

- 12:15 – 13:15 **Course: Writing multithreaded programs in Pascal.**

Location: Facultad de Ciencias/ Faculty of Sciences

Room: SUN

Instructor: Primož Gabrijelčič

Tuesday, 4th July (2/2)

- 15:20pm -16:20pm **Technical Session I**
Location: Facultad de Ciencias
Room: Aula Magna I
Instructor: Marco Cantú
- 16:25 – 17:25 **Course: Deploying and using cloud solutions with Delphi.**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Antonio Zapater
- 16:25 – 17:25 **Course: Developing games using Castle Game Engine.**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: E1
Instructor: Michalis Kamburelis
- 17:30 - 18:35 **Course: Developing advanced Client/Server applications with Pascal**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Emilio Pérez
- 18:40 – 19:40 **Course: An introduction to deep learning with CAI NEURAL API**

Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Dr. Joao Paulo Schwarz Schuler
- 21:30 **Gala Dinner**
Location: Hospedería Fonseca
Price: 32 euros
Note: Please book it, bringing the exact amount.

Wednesday 5th , July (1/2)

- 10:00 am -11:00 am **Plenary Talk IV**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Detlef D. Overbeek

Title: "Free Pascal: Past, Present and Future."

Summary: Free pascal is an open-source compiler since before the word "open source" became popular. The talk will present the team behind the compiler and IDE, the evolution of the compiler and toolchain will be discussed, what is currently being worked on, as well as the plans for the future development of the compiler.

- 11:05 am -12:05pm **Plenary Talk V**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Bruno Fierens

Title: "Object Pascal everywhere"

Summary: In this session we will discuss how software developers can use a single language Object Pascal to create applications for machines ranging from SBCs to mobile devices, desktop operating systems, browsers and servers. This can be reached via native applications as well as web client applications. And this can be done from different IDEs on different operating systems. On top of this, applications cannot only be created with a single language Object Pascal, but also a component architecture FNC allows to use the same Object Pascal components under all these circumstances.

- 12:15 – 13:15 **Course: Writing multithreaded programs in Pascal.**

Location: Facultad de Ciencias/ Faculty of Sciences

Room: SUN

Instructor: Primož Gabrijelčič

Wednesday 5th , July (2/2)

- 15:20pm -16:20pm **Technical Session II**
Location: Facultad de Ciencias
Room: Aula Magna I
Instructor: Bruno Fierens
- 15:20pm -16:20pm **Technical Session III**
Room: Aula SUN
Keynote speaker: Daniele Teti
Instructor: DelphiMVCFramework
- 16:25 – 17:25 **Course: Deploying and using cloud solutions with Delphi.**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Antonio Zapater
- 16:25 – 17:25 **Course: Developing games using Castle Game Engine.**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: E1
Instructor: Michalis Kamburelis
- 17:30 - 18:35 **Course: Developing advanced Client/Server applications with Pascal**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Emilio Pérez
- 18:40 – 19:40 **Course: An introduction to deep learning with CAI NEURAL API**

Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Dr. Joao Paulo Schwarz Schuler
- 11:00pm.- **Karaoke**
Location: Irish Theater

Thursday 6th, July (1/2)

- 10:00 am -11:00 am **Plenary Talk VI**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Daniele Teti

Title: " Developing frontend and backend in Pascal: past, present and future"

Summary: In an interconnected world the web development is the most important theme for programmers. No one can stick the head in the sand and continue to develop like in the early 90'. Mobile and IoT revolutions starting some years ago are still in full expansion. What does it mean for our beloved Pascal? Is the "lord of the browsers" a.k.a. JavaScript, the only language usable for web browsers? What about WebAssembly? Will be the awaited revolution for the web? What about the backend? Can we efficiently use Pascal as backend language gaining a productivity boost? Are the pillars of Pascal still an advantage in the today programming landscape? We are going to try to response to all these questions (and more) during this talk.

- 11:05 am -12:05 pm **Plenary Talk VII**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Michalis Kamburelis

Title: "Developing games and graphic visualizations in Pascal"

Summary: An overview of the most important concepts of developing graphic applications, including in particular 3D visualizations and games, and how to do them in practical Pascal applications. The talk is directed at both FPC/Lazarus and Delphi users. We will start with an overview of APIs, like OpenGL(ES) and Vulkan, and their most important concepts like shaders. We will show how to use these graphic APIs from Pascal, from various Delphi and Lazarus visual libraries. Then we will move to high-level libraries and game engines, like Castle Game Engine, Apus Game Engine, Firemonkey 3D, and BeRo projects (RNL, Kraft, PasVulkan). Finally I will talk about the important features you should consider when choosing a library (and creating your own): 3D model formats (how and why are formats like glTF and X3D developed), PBR (physically based rendering), mixing 2D and 3D, physics and more.

- 12:15pm – 13:15pm **Course: Writing multithreaded programs in Pascal.**

Location: Facultad de Ciencias/ Faculty of Sciences

Room: SUN

Instructor: Primož Gabrijelčič

Thursday 6th, July (2/2)

- 15:20pm -16:20pm **Course: Writing multithreaded programs in Pascal.**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Primož Gabrijelčič
- 16:25 – 17:25 **Course: Deploying and using cloud solutions with Delphi.**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Antonio Zapater
- 16:25 – 17:25 **Course: Developing games using Castle Game Engine.**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: E1
Instructor: Michalis Kamburelis
- 17:30 - 18:35 **Course: Developing advanced Client/Server applications with Pascal**
Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Emilio Pérez
- 18:40 – 19:40 **Course: An introduction to deep learning with CAI NEURAL API**

Location: Facultad de Ciencias/ Faculty of Sciences
Room: SUN
Instructor: Dr. Joao Paulo Schwarz Schuler
- 20:00 **Having a drink.**

Location: Plaza Mayor

Friday 7th, July (1/2)

- 10:00am – 10:40am **Software Factory Talk I**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Antonio Zapater

Title: " RAD Server: Delivering Enterprise data via REST in minutes "

Summary: Use RAD Server and FireDAC to connect to Enterprise data and share it rapidly via a secure fully featured MEAP that can be deployed on Windows or Linux servers ready for use on any device or platform.

- 10:45am – 11:45am **Software Factory Talk II**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Michael Philippenko

Title: " News of Fast Reports' Ecosystem for Delphi in 2023"

Summary: For 25 years, Fast Reports have been making the work of programmers in the fields of reporting and business analysis fast and efficient. A make just brief review of news in the latest FastReport VCL and FastCube: what's new, some improvements for end-users, and for developers. First of all, it is about the Fast Reports Ecosystem, the support of the latest standards for displays, documents (bar-codes and PDF signification), multithreading in printing, and HTML and PDF integration. And also, a set of new tools for software developers at the design time of the project and report.

- 11:55pm-12:30pm **Factory Talk III**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Antonio Zapater

Title: "Adding Mobile Support to existing RAD Studio Applications"

Summary: Discover the basics of mobile development with RAD Studio, and how you can quickly and easily add mobile to any desktop application today.

- 12: 30 -13:30 Round table "AI in the Industry of Software"

Speakers: Prof. Juan Manuel Corchado, Marco Cantù, Michael Philippenko, Dr. Joao Paulo Schwarz Schuler, Richard Hatherall.

- 13:35-14:05 **Software Factory Talk IV**

Keynote speaker: Marco Cantù

Title: " Delphi address"

Friday 7th, July (2/2)

- 16:00-17:00 **Software Factory Talk V**

Location: Facultad de Traducción e Interpretación/ Faculty of Translation and Interpretation

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Michael Philippenko

Title: " Basics about reporting for Pascal developers"

Summary:

- What does "reporting" mean in software development? Easy examples of complex applications.
- We have several perfect Rapid Application Development environments for Pascal development; what about "Rapid Reporting Development Environment"? Evolution of reporting libraries.
- All the software is created for people, but what do end-users and businesses really expect from the reports?
- A brief comparison of reporting tools for Lazarus and Delphi.

- 17: 05 -17:35 **Software Factory Talk VI**

Room: Salón de Actos/ Assembly Hall

Keynote speaker: Daniele Teti

Title: DelphiMVCFramework

- 17:40-18:40 **Round table "Current challenges in the industry of Software"**

Speakers: Marco Cantù, Michael Philippenko, Primož Gabrijelčič, Daniele Teti

- 18:40-19:00 **Closure Ceremony**

- 21:30 **Gala Dinner**

Location: Hospedería Fonseca

Price: 37 euros

Note: Please book it, bringing the exact amount.

Plenary speakers and Instructors



Johannes W. Dietrich is head of the Centre of Rare Endocrine Diseases and the Centre for Diabetes Technology at Ruhr University Hospitals. He is the founder of multiple scientific software development projects mainly based on Object Pascal and R, including:

- SimThyr (simulation program for thyroid homeostasis)
- SPINA Thyr (structure parameter inference approach for endocrine feedback control)
- SimulaBeta (simulation program for insulin-glucose homeostasis)
- CyberUnits (class library for computational cybernetics)
- TRURL (suite of RPN calculators and class library for Object Pascal)
- PUMA Repository (Pascal units for medical applications)
- Triangolo (liothyronine dosage calculator)



Marco Cantù holds a master's degree in information technology from the Polytechnic of Milan, and he is the author of dozens of best-selling books on Delphi and its Object Pascal language. Marco was an independent consultant and developer for 20 years, focused primarily on Pascal and Delphi but also on C++ and JavaScript. Marco was a professional trainer and frequent conference speaker, and he is the author of countless articles on Delphi. Currently, he is the Delphi Product Manager at Embarcadero Technologies, a business unit of Idera, Inc.



Dr. Michalis Kamburelis is the lead developer of Castle Game Engine, an open-source 3D and 2D game engine using modern Object Pascal. The engine features a visual editor and a powerful and fast API, and it supports a range of formats for assets, including Khronos glTF and Web3D X3D. Michalis is also a member of Web3D consortium, helping to develop X3D standard, and a liaison between Web3D and Khronos consortiums to align glTF and X3D, two main standards for 3D models. Michalis is also a co-owner and CTO of Cat-astrophe Games LLC, an indie Polish game development company. He is also the lead maintainer of a documentation generator for the Pascal language, and he wrote the book *Modern Object Pascal Introduction for Programmers*.



Bruno Fierens studied civil electronic engineering at University of Ghent, Belgium. He started his career as an R&D digital hardware engineer at Barco Graphics Belgium designing with FPGA, VHDL, graphic processors, PCI, Silicon Graphics add-on boards, high-end printer controllers and more. In 1987, he began writing software in Turbo Pascal 3.0, and since then he has used all Borland Pascal and Delphi versions. In 1996, he founded TMS Software, developing VCL components starting with Delphi 1. The company has become internationally known for its components for different environments to develop software. He has been an Embarcadero MVP since 2012, and he is also a regular speaker at international software conferences, such as Be-Delphi, DelphiTage, ITDevCon, CodeWay Tour, EKON, DevTracks, SDN and more.



Primož Gabrijelčič has worked with Pascal since 1986, when he started to explore the language on a Sinclair ZX Spectrum. He later moved to CP/M, VAX/VMS and DOS, but stayed loyal to the language. For the last 25+ years, he has been developing systems for management and the real-time transmission of subtitles and teletext, which are used in many European countries. Most of that time, he has worked on writing multithreaded Delphi applications which resulted in a well-known open-source multithreading Delphi library, OmniThreadLibrary. He has written three books about Delphi programming, and he manages a technical Delphi blog, *The Delphi Geek*.



Daniele Teti is a software architect, trainer, book author and consultant with more than 20 years of professional experience. He is the main developer and driver of the most popular open-source Delphi project on GitHub: the Delphi MVC Framework. Teti is the author of the best-selling *Delphi Cookbook* series published by Packt Publishing.



Dr. Joao Paulo Schwarz Schuler has a PhD in computer science and mathematics of security from the Universitat Rovira i Virgili and a master's degree in computer science from Universidade Federal do Rio Grande do Sul. He has worked for different software companies using Delphi as a software development team leader. Currently he is completing a doctoral thesis on convolutive neural networks. He is well known in the Pascal community for developing deep learning APIs for Pascal, called CAI NEURAL API, which has a GNU Lesser General Public License.



Antonio Zapater Pre-sales consultant engineer at Embarcadero inc. and certified Delphi developer. He co-owned a company for more than 15 years which develops ERP solutions for the retail sector using Delphi since version 7. Highly experienced with database modelling, legacy Delphi code migration, mobile development with FireMonkey, full-stack web development, API modelling, containerization as well as Linux services development using Delphi..



Emilio Perez, a technical engineer in computer management, works as a technology consultant and trainer. He has more than 20 years of experience in the software industry in both the training and development of commercial projects. He is also the founder and CEO of the company Abatic Soluciones Tecnológicas, and he has more than 2,500 hours of training experience in Delphi, SQL, PL/SQL, JAVA, PostgreSQL and WordPress, among other technologies. Since September 2013, he has served as Delphi MVP for Embarcadero. In addition, he is the creator of the podcasts *No Solo Delphi* and *Aprende a Programar* and a promoter in Spanish-speaking communities of free software, such as PostgreSQL and Delphi MVC Framework.



Michael Philippenko is Co-founder and one of the leaders of Fast Reports Inc. since 1998. He has a university degree of the specialty of automated systems of information processing and control, has the qualification for high school teacher, and an enterprise manager ("mini MBA"). He headed the programming department of the College of Communications and Informatics of the Rostov city (2016-2019), and he is a member of the Independent Software Developers Forum (ISDEF.org).

Niklaus Wirth Awards



N. Wirth

The International Pascal Congress considers it essential to implement measures to promote the development of Pascal and technologies based on this language within the computer science field. Among these actions is the creation of awards to stimulate and strengthen the Pascal community. The IPC will grant two awards named after Niklaus Wirth, a pioneer in the creation of programming languages. In 1984, he received the Turing Award for his work on the development of programming languages.

NWA for the Most Valuable Contributor

This award is intended to recognise individuals who have made a significant contribution to improving, developing and strengthening the community of software developers using Pascal in any of its variants for software creation.

The winner of this edition has been the software architect **Marco Cantù**.

Assistance and insurance

Participants are advised to make their own arrangements regarding travel insurance and medical assistance during the Conference. Neither the Organization nor the Conference Secretariat is able to accept any responsibility whatsoever for damage or injury to persons or their belongings during the Conference.

Electricity

Electric supply is AC 220 V / 50 Hz standard continental European, with two round pin plugs for appliances.

Currency, Banks, and Tipping

The monetary unit in Spain is the EURO (symbol €). The euro is divided into a hundred cents (symbol ¢). Coins: 1, 2, 5, 10, 20 and 50 cents; 1 and 2 euros. Banknotes: 5, 10, 20, 50, 100, 200 and 500 euros. Banknotes of 500 euros are usually only accepted at bank offices. The maximum cash payment allowed is 2500 euros. All international credit cards (Visa, American Express, Master Card, Euro-card, Diners Club, etc.) are widely accepted by hotels, restaurants, and shops, and also in many ATMs or cashpoints. Business is transacted from 09:00 to 14:00 h. Monday to Friday. Money can be changed outside normal banking hours at hotels, travel agencies and other business, displaying a “Cambio/Change” sign. Take your passport or identity card with you when changing traveller’s checks. Since the service charge is normally included in restaurant, hotel and taxi bills, tipping is always optional.



INTERNATIONAL PASCAL CONGRESS

Organized by



**VNiVERSIDAD
D SALAMANCA**



Sponsored by



Fast Reports