## Personal information


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|---|---|
| Surname(s) / First name(s) | **Quinteros, Javier** |
| Address(es) | Erfurter Str. 16, 10825 Berlin, Germany |
| Telephone(s) | +49 (30) 9559 1667 |
| Email(s) | javier@gfz-potsdam.de |
| Nationality(-ies) | German, Argentine |
| Date of birth | 17.05.1973 |


## Education and Professional experience

| | |
|---|---|
| 2013–present | GeoForschungsZentrum - Seismology - GEOFON |
| Working on | Data Management of seismic archive, Design of next generation tools for Scientific Data. Part-time doing research on Geodynamics. |
| Head of Section | Prof. Dr. Frederik Tilman |
| Description | Implementation of internationally recognized best practices for data centres at GEOFON (RDA/EUDAT 2020). Definition of a Data Managment Plan for GEOFON and enforcement of written policies at all operational levels (EUDAT 2020). New architecture of the EIDA next generation platform (EIDA/EPOS) as well as services for the management of Scientific Data (EUDAT 2020). |
| 2008–2013 | **Postdoctoral position** - GeoForschungsZentrum - Geodynamic Modeling |
| Research on | Numerical models applied to geodynamics. |
| Group Leader | Prof. Dr. Stephan V. Sobolev |
| Description | Development and use of thermo-mechanical models based on Navier-Stokes equations for the study of Geodynamics. The main focus was on processes related with lithosperic deformation or deep subduction. However, some studies have also been made in the scale of millimetric deformation. |
| 2008 | **Postdoctoral position in Computer Sciences** - University of Buenos Aires |
| Research on | Finite element method applied to geodynamics. |
| Advisors | Prof. Dr. Pablo Jacovkis and Prof. Dr. Víctor Ramos. |
| Description | Development of numerical models for the simulation of geophysical processes. A strong point of the research plan was the study of the scalability of different numerical approaches. |
| 2008 | **PhD in Computer Sciences** - University of Buenos Aires |
| Thesis title | Numerical Model of an Andean System and its behavior due to climatic and rheological variations. |
| Advisors | Prof. Dr. Pablo Jacovkis and Prof. Dr. Víctor Ramos. |
| Description | Implementation of numerical models for the simulation of the interaction of an orogen formation and changing climate conditions through million years. |
| 2003 | **Licenciado in Computer Sciences (Masters equivalent)** - University of Buenos Aires |
| Thesis title | Optimal bit allocation in the quantization of the (multi)wavelet transform. |
| Advisor | Prof. Dr. Ana M. C. Ruedin. |

## Teaching and advising experience

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|---|---|
| 2016 | **Speaker** - International Centre for Theoretical Physics |

School on Seismology beyond Textbooks

2015 **Speaker** - Geo.X Second SULU Workshop
SeisComP3 for data handling and analysis

2015 **Invited Professor** - University of Buenos Aires (FCEN)
Introduction to thermo-mechanical modelling for geodynamics

2015–2020 **PhD Supervision** - BARRIONUEVO, M. *Modelado numérico de la orogenia relacionada a subducción en los Andes Centrales del Sur (30-36° S). Análisis del papel de las características de la placa superior.* PhD thesis, University of Buenos Aires, Buenos Aires, Argentina, In progress.

2014–2016 **PhD Supervision** - WALTER, M. *Geodynamic Evolution of the Neuquén Andes*. PhD thesis, University of Potsdam, Potsdam, Germany, In progress.

2008–2009 **Master Thesis Supervision** - BURSZTYN, G. H. Una nueva implementación para las ecuaciones de Navier-Stokes mediante KLE y elementos espectrales. Master's thesis, University of Buenos Aires, Buenos Aires, Argentina, Oct 2009.

1996–2008 **Teaching Assistant** - University of Buenos Aires (FCEN)
New Techniques in Data Compression (2000–2008)
Data Systems (1999–2000)
Computer Architecture II (1996–1998)

## Personal skills and competences

Scientific Data Management: iRODS, Persistant Identifiers, Cloud solutions, Automatic Workflows, AAI solutions.

Programming languages: Python, C, C++, MPI, Matlab, Octave, UNIX shell scripting, SQL and others.

## Others

Journal, Book and Project reviewer:
The Andes - Active subduction orogeny. Springer Verlag (2006).

Physics of the Earth and Planetary Interiors.
Journal of Structural Geology.
Journal of South American Earth Sciences.
Studia Geophysica et Geodaetica.
Revista de la Asociación Geológica Argentina.
National Agency of Scientific and Technological Promotion (ANPCyT - Argentina)
Mecánica Computacional.

Mother tongue(s): **Spanish**

Other language(s): English and German

## References

**Frederik Tilmann** (tilmann@gfz-potsdam.de). GeoForschungsZentrum. Potsdam, Germany.
**Stephan V. Sobolev** (stephan@gfz-potsdam.de). GeoForschungsZentrum. Potsdam, Germany.
**Andrey Babeyko** (babeyko@gfz-potsdam.de). GeoForschungsZentrum. Potsdam, Germany.

**Víctor A. Ramos** (andes@gl.fcen.uba.ar). Department of Geological Sciences. Universidad de Buenos Aires.
**Suzanne Mahlburg Kay** (smk16@cornell.edu). Department of Earth and Atmospheric Sciences. Cornell University.
**Ruben Somoza** (somoza@gl.fcen.uba.ar). Department of Geological Sciences. Universidad de Buenos Aires.
**Pablo M. Jacovkis** (jacovkis@dc.uba.ar). Computer Sciences Department. Universidad de Buenos Aires.

## Research Projects

2015-2020 — Univ. of Potsdam/GeoForschungsZentrum
*Surface processes, Tectonics and Georesources: The Andean forland basin of Argentina (StRATEGy)*.
Speaker: Prof. Dr. Manfred Strecker.
Category: Co-PI of subproject.

2015-2018 — *EUDAT2020*.
Category: Service Integrator / Development Group.

2013-2016 — Helmholtz International Research Group
*Geodynamic Evolution of the Neuquen Andes: Implications for Geo-Resources*.
Category: PI / Head of the research group.

2008 — UBACyT - Univ. of Buenos Aires
*Computational Methods in some topics of continuum mechanics*.
Director: Prof. Dr. Pablo Jacovkis.
Category: Researcher.

2004-2007 — UBACyT - Univ. of Buenos Aires, Code: X-160
*Tectonic processes related to subduction. Comparative analysis*.
Director: Prof. Dr. Víctor Ramos.
Category: Research Assistant.

2004-2007 — PICT - FONCYT, Code: 26001
*Wavelets and Neural Networks: Integrated Approaches and Applications*.
Director: Prof. Dr. Ana M. C. Ruedin and Prof. Dr. Enrique Segura.
Category: PhD Student.

## Scientific Publications

Peer-reviewed full articles

STROLLO, A., HANKA, W., SAUL, J., HEINLOO, A., HEMMLEB, S., EVANS, P., QUINTEROS, J., ZIEKE, T., JAECKEL, K.-H., AND TILMANN, F. Geofon: Geoforschungsnetz. *Journal of Large-scale Research Facilities In preparation* (2017).

MELNICK, D., MORENO, M., QUINTEROS, J., BAEZ, J. C., DENG, Z., LI, S., AND ONCKEN, O. The super-interseismic phase of the megathrust earthquake cycle in Chile. *Geophysical Research Letters In Press* (2017).

CYPRYCH, D., BRUNE, S., PIAZOLO, S., AND QUINTEROS, J. Strain localization in polycrystalline material with second phase particles: Numerical modeling with application to ice mixtures. *Geochemistry, Geophysics, Geosystems 17* (2016), 3608–3628.

CLIFT, P. D., BRUNE, S., AND QUINTEROS, J. Climate changes control offshore crustal structure at South China Sea continental margin. *Earth and Planetary Science Letters 420* (2015), 66–72.

DUESTERHOEFT, E., QUINTEROS, J., OBERHAENSLI, R., BOUSQUET, R., AND DE CAPITANI, C. Relative impact of mantle densification and eclogitization of slabs on subduction dynamics: a numerical thermodynamic/thermokinematic investigation of metamorphic density evolution. *Tectonophysics 637* (2014), 20–29.

QUINTEROS, J., AND SOBOLEV, S. V. Why has the Nazca plate slowed since the Neogene? *Geology 41*, 1 (2013), 31–34.

MELNICK, D., GARCIN, Y., QUINTEROS, J., STRECKER, M. R., OLAGO, D., AND TIERCELIN, J.-J. Steady rifting in northern Kenya inferred from deformed Holocene lake shorelines of the Suguta and Turkana basins. *Earth and Planetary Science Letters 331–332* (2012), 335–346.

QUINTEROS, J., AND SOBOLEV, S. V. Constraining kinetics of metastable olivine in Marianas slab from seismic observations and dynamic models. *Tectonophysics 526–529* (2012), 48–55.

OTERO, A. D., AND QUINTEROS, J. General parallel finite/spectral-element oriented C/C++ framework. In *Proceedings of the Second International Conference on Parallel, Distributed, Grid and Cloud Computing for Engineering*, P. Iványi and B. H. V. Topping, Eds. Civil-Comp Press, Stirlingshire, UK, 2011. Paper 68.

QUINTEROS, J., SOBOLEV, S. V., AND POPOV, A. A. Viscosity in transition zone and lower mantle. Implications for slab penetration. *Geophysical Research Letters 37* (2010), L09307.

GHIGLIONE, M. C., QUINTEROS, J., YAGUPSKY, D., BONILLO-MARTÍNEZ, P., HLEBSZEVTICH, J., RAMOS, V. A., VERGANI, G., FIGUEROA, D., QUESADA, S., AND ZAPATA, T. Structure and tectonic history of the foreland basins of southernmost South America. *Journal of South American Earth Sciences 29*, 2 (2010), 262–277.

BURSZTYN, G. H., QUINTEROS, J., AND OTERO, A. D. An object oriented version of the Kinematic Laplacian Equation Method. In *Mecánica Computacional*, E. Dvorkin, M. Goldschmit, and M. Storti, Eds., vol. XXIX. Buenos Aires, Argentina, 2010, pp. 2095–2110.

QUINTEROS, J., AND OTERO, A. D. Towards parallel solution of continuous problems by means of a general finite/spectral-element oriented C/C++ framework. In $39^{\circ}$ *International Conference on Computer Science and Operational Research*. Buenos Aires, Argentina, 2010, pp. 3195–3210.

QUINTEROS, J., RAMOS, V. A., AND JACOVKIS, P. M. An elasto-visco-plastic model using the finite element method for crustal and lithospheric deformation. *Journal of Geodynamics 48*, 2 (2009), 83–94.

BURSZTYN, G. H., OTERO, A. D., AND QUINTEROS, J. Una nueva implementación para las ecuaciones de Navier-Stokes mediante KLE y elementos espectrales. In *Mecánica Computacional*, vol. XXVII. San Luis, Argentina, 2008, pp. 2367–2383.

QUINTEROS, J., AND KIND, M. V. A wavelet-based methodology for data integration in reservoir modeling. In *Modelado Geológico*, P. Agraz, C. Larriestra, H. Verdur, A. Montagna, and J. Massaferro, Eds. Instituto Argentino del Petróleo y del Gas, Mar del Plata, Argentina, 2008, pp. 239–261.

QUINTEROS, J., JACOVKIS, P. M., AND RAMOS, V. A. Diseño flexible y modular de modelos numéricos basados en Elementos Finitos. In *Mecánica Computacional*, S. A. Elaskar, E. A. Pilotta, and G. A. Torres, Eds., vol. XXVI. Córdoba, Argentina, 2007, pp. 1724–1740.

KIND, M. V., AND QUINTEROS, J. History-Matched Reservoir Model Validation based on Wavelets Methods. In *2007 SPE Latin American and Caribbean Petroleum Engineering Conference*. Buenos Aires, Argentina, Apr 2007, p. 11 pp.

QUINTEROS, J., JACOVKIS, P. M., AND RAMOS, V. A. Evolution of the Upper Crustal Deformation in Subduction Zones. *Journal of Applied Mechanics 73*, 6 (2006), 984–994.

QUINTEROS, J., JACOVKIS, P. M., AND RAMOS, V. A. Formación de cordilleras y delaminación litosférica. un modelo elasto-visco-plástico mediante elementos finitos. In *Mecánica Computacional*, A. Cardona, N. Nigro, V. Sonzogni, and M. Storti, Eds., vol. XXV. Santa Fe, Argentina, 2006, pp. 2669–2686.

QUINTEROS, J., RAMOS, V. A., AND JACOVKIS, P. M. Modelado Numérico para la deformación de la corteza superior en los Andes Australes. *Revista de la Asociación Geológica Argentina 60*, 4 (2005), 714–723.

QUINTEROS, J., JACOVKIS, P. M., AND RAMOS, V. A. Modelado numérico del levantamiento orogénico y su potencial relación con clima y erosión. In *Mecánica Computacional*, G. C. Buscaglia, E. A. Dari, and O. M. Zamonsky, Eds., vol. XXIII. Bariloche, Argentina, Nov 2004, pp. 2923–2931.

QUINTEROS, J., AND RUEDIN, A. M. C. Minimization of errors in L4-norm for decoding quantized data: its application to quantization of wavelet coefficients. In $33^{\circ}$ *International Conference on Computer Science and Operational Research* (Córdoba, Argentina, Sep 2004).

QUINTEROS, J., AND RUEDIN, A. M. C. Quantization of wavelet coefficients. In $32^{\circ}$ *International Conference on Computer Science and Operational Research* (Buenos Aires, Argentina, Sep 2003).

Published Software

BIANCHI, M., EVANS, P. L., HEINLOO, A., AND QUINTEROS, J. WebDC3 Web Interface. GFZ German Research Center for Geosciences.

Extended and short abstracts

STROLLO, A., SAUL, J., QUINTEROS, J., EVANS, P., ZACCARELLI, R., HEINLOO, A., HEMMLEB, S., ZIEKE, T., GUENTHER, M., JAECKEL, K.-H., HANKA, W., AND TILMANN, F. Geofon services for the german geophysical community. In *77. Jahrestagung der Deutschen Geophysikalischen Gesellschaft e.V.* (Potsdam, Germany, Apr 2017), vol. A-524.

TRANI, L., KOYMANS, M., QUINTEROS, J., HEINLOO, A., EUCHNER, F., STROLLO, A., SLEEMAN, R., CLINTON, J., STAMMLER, K., DANECEK, P., PEDERSEN, H., IONESCU, C., PINAR, A., AND EVANGELIDIS, C. The european seismological waveform framework eida. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2017), vol. EGU2017-13770.

LIU, S., SOBOLEV, S. V., AND QUINTEROS, J. First results of high-resolution modeling of Cenozoic subduction orogeny in Andes. In *2016 Fall Meeting* (San Francisco, Calif., Dec 2016), vol. In Press, AGU.

FENNELL, L. M., WALTER, M., QUINTEROS, J., AND FOLGUERA, A. Late Oligocene - Early Miocene extension in the Central Andes: insights from numerical modeling. In *Primer Simposio de Tectónica Sudamericana* (Santiago, Chile, Nov 2016), vol. In Press.

QUINTEROS, J., HEMMLEB, S., EVANS, P., HEINLOO, A., AND STROLLO, A. Latest develpments at GEOFON Data Centre. In *35th General Assembly of the European Seismological Commision* (Trieste, Italy, Sept 2016).

DUPONT, A., HEINLOO, A., BOSSU, R., SAUL, J., MAZET-ROUX, G., STROLLO, A., ROUSEL, F., EVANS, P., AND QUINTEROS, J. Real-time synergy between seismological institutions to confirm and locate earthquakes: from EMSC's slashdot detections to the exploitation of GFZ's network of seismic networks thanks to HMB messaging service. In *35th General Assembly of the European Seismological Commision* (Trieste, Italy, Sept 2016).

QUINTEROS, J., EVANS, P., STROLLO, A., ULBRICHT, D., ELGER, K., AND BERTELMANN, R. Moving towards persistent identification in the seismological commmunity. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2016), vol. 18.

BARRIONUEVO, M., MESCUA, J., QUINTEROS, J., AND GIAMBIAGI, L. Propuesta de desarrollo de modelos numéricos para analizar procesos geodinámicos en los Andes Centrales (30-36 s). In *XVI Reunión de Tectónica* (General Roca, Río Negro, Argentina, Oct 2015).

WALTER, M., QUINTEROS, J., AND SOBOLEV, S. V. Numerical modeling of fluid migration in subduction zones. In *2015 Fall Meeting* (San Francisco, Calif., Dec 2015), vol. In Press, AGU.

CLIFT, P. D., BRUNE, S., AND QUINTEROS, J. Climate modulated erosion and sediment flux control offshore crustal structure at south china sea continental margin. In *2015 Fall Meeting* (San Francisco, Calif., Dec 2015), vol. In Press, AGU.

CZAPLINSKA, D., BRUNE, S., AND QUINTEROS, J. Strain localisation in two-phase materials: Insights from centimetre-scale numerical models and laboratory experiments with ice mixtures. In *2015 Fall Meeting* (San Francisco, Calif., Dec 2015), vol. In Press, AGU.

CLIFT, P. D., BRUNE, S., AND QUINTEROS, J. Climate modulated erosion and sediment flux control offshore crustal structure at south china sea continental margin. In *Geological Society of America Abstracts with Programs* (Baltimore, Maryland, USA, Nov 2015), vol. 47–32, GSA.

STROLLO, A., QUINTEROS, J., SLEEMAN, R., TRANI, L., CLINTON, J., STAMMLER, K., DANECEK, P., PEDERSEN, H., AND IONESCU, C. EIDA Next Generation: ongoing and future developments. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2015), vol. 17, p. 9924.

WALTER, M. J., QUINTEROS, J., AND SOBOLEV, S. V. Numerical modeling of fluid migration in subduction zones. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2015), vol. 17, p. 8532.

WICHURA, H., QUINTEROS, J., MELNICK, D., BRUNE, S., SCHWANGHART, W., AND STRECKER, M. R. Evolution of the Lake Victoria basin in the context of coeval rift initiation in East Africa: a 3D numerical model approach. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2015), vol. 17, p. 5950.

BRUNE, S., CLIFT, P. D., AND QUINTEROS, J. Anomalous subsidence at South China Sea rifted margin: Sediments digging their own hole. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2015), vol. 17, p. 8172.

THIEULOT, C., BUITER, S., BRUNE, S., DAVIES, R., DURETZ, T., GERBAULT, M., GLERUM, A., QUINTEROS, J., SCHMALHOLZ, S., AND SPAKMAN, W. A two- and three-dimensional numerical comparison study of slab detachment. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2015), vol. 17, p. 9255.

WALTER, M., QUINTEROS, J., AND SOBOLEV, S. V. Implementing fluid flow in SLIM-3D. In *Proceedings of GeoMod2014 - Modelling in Geosciences: Programme and Extended Abstracts* (Potsdam, Germany, Sep 2014), K. Elger, O. T. Haug, and M. Ritter, Eds.

DUESTERHOEFT, E., QUINTEROS, J., OBERHAENSLI, R., AND BOUSQUET, R. Early-stage subduction dynamics: a combined thermodynamic and geodynamic model. In *15th Symposium on Tectonics, Structural Geology and Geology of Crystalline Rocks* (Potsdam, Germany, Apr 2014).

QUINTEROS, J., AND SAUL, J. A fully automated implementation of the mBc magnitude for a real-time system. In *Second European Conference on Earthquake Engineering and Seismology* (Istanbul, Turkey, Aug 2014).

MORENO, M., BAEZ, J. C., BEDFORD, J., QUINTEROS, J., TASSARA, A., MELNICK, D., ONCKEN, O., VIGNY, C., BARTSCH, M., ROSENAU, M., SOTO, H., BEVIS, M., AND BARRIENTOS, S. Did the 2010 Chile earthquake change the locking degree at neighboring plate interface segments of the Andean subduction zone? In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2014), vol. in Press.

QUINQUIS, M., BUITER, S., TOSI, N., THIEULOT, C., MAIEROVÁ, P., AND QUINTEROS, J. A numerical model setup for subduction: From linear viscous to thermo-mechanical rheologies. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2013), vol. 15, pp. EGU2013–7255–1.

QUINTEROS, J., AND SOBOLEV, S. V. Why does the convergence rate between Nazca and South America slow since the Neogene? In *2012 Fall Meeting* (San Francisco, Calif., Dec 2012), vol. T43F-2738, AGU.

QUINTEROS, J., AND SOBOLEV, S. V. Why does the convergence rate between Nazca and South America decrease since the Neogene? In *Geodynamics Workshop 2012* (Wandlitz, Germany, Sep 2012), Deutsche Geophysikalische Gesellschaft.

QUINTEROS, J., AND SOBOLEV, S. V. Kinetics of metastable olivine constrained by seismic observations and dynamic models. In *12th Workshop on Mantle Convection and Lithospheric dynamics* (Potsdam, Germany, Aug 2011).

QUINTEROS, J., AND SOBOLEV, S. V. Viscosity in transition zone and lower mantle constrained by numerical models. In *12th Workshop on Mantle Convection and Lithospheric dynamics* (Potsdam, Germany, Aug 2011).

QUINTEROS, J., AND SOBOLEV, S. V. Viscosity in transition zone and shallow lower mantle - Insight from numerical models of subduction. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2011), vol. 13, pp. EGU2011–12447.

QUINTEROS, J., AND SOBOLEV, S. V. Did growth of high Andes slow down Nazca plate subduction? In *2010 Fall Meeting* (San Francisco, Calif., Dec 2010), vol. T11A-2040, AGU.

QUINTEROS, J., AND SOBOLEV, S. V. Constraining viscosity in transition zone and shallow lower mantle from numerical models of subduction. In *International Geological Modelling Conference - GeoMod 2010* (Lisboa, Portugal, Sep 2010).

QUINTEROS, J., AND SOBOLEV, S. V. The role of fluids in the subduction channel: towards a new thermomechanical model. In *11th Workshop on Mantle Convection and Lithospheric dynamics* (Braunwald, Switzerland, Jun 2009), pp. 91–92.

QUINTEROS, J., AND SOBOLEV, S. V. Towards a new thermomechanical model of subduction channel. In *Geophysical Research Abstracts* (Vienna, Austria, Apr 2009), vol. 11, pp. EGU2009–8684.

QUINTEROS, J., RAMOS, V. A., AND JACOVKIS, P. M. Constraints on delamination from numerical models. In $7^{\circ}$ *International Symposium on Andean Geodynamics* (Nice, France, Sep 2008), IRD Éditions, pp. 417–420.

QUINTEROS, J., RAMOS, V. A., AND JACOVKIS, P. M. Estudio de la delaminación cortical en un orógeno mediante un modelo numérico. In *XIII Reunión de Tectónica* (San Luis, Argentina, Oct 2006), pp. 49–49.

QUINTEROS, J. Interaction between Deformation and Erosion in the Southern Patagonian Andes. In *Backbone of the Americas - Patagonia to Alaska* (Mendoza, Argentina, Apr 2006).

QUINTEROS, J., RAMOS, V. A., AND JACOVKIS, P. M. A finite element model for the early to middle Miocene evolution of the Patagonian Andes at $47^{\circ}$s. In $6^{\circ}$ *International Symposium on Andean Geodynamics* (Barcelona, Spain, 2005), IRD Éditions, pp. 582–585.

QUINTEROS, J., RAMOS, V. A., AND JACOVKIS, P. M. Numerical model for Upper Crustal deformation. In *Actas del XVI Congreso Geológico Argentino* (La Plata, Argentina, Sep 2005), vol. 1, pp. 415–420.

GHIGLIONE, M. C., QUINTEROS, J., HLEBSZEVITSCH, J., YAGUPSKY, D., HARING, C., AND VERGANI, G. Cuencas del extremo Austral de la Placa Sudamericana: Diferencias, conexiones y una historia en común. In *Actas del XVI Congreso Geológico Argentino* (La Plata, Argentina, Sep 2005), vol. 1, pp. 201–206.

QUINTEROS, J., RAMOS, V. A., AND JACOVKIS, P. M. Miocene crustal deformation in Southern Patagonian Andes and the rain-shadow effect - Argentina and Chile. In *Terra Nostra* (Potsdam, Germany, Apr 2005), G. Alfred-Wegener-Stiftung, Ed., vol. 1, pp. 95–95.

Invited speaker in Scientific Meetings

QUINTEROS, J. Seismology in 21st century: from seismic stations to a professional data center. In *4th KSETA Plenary Workshop 2017* (Durbach, Germany, Feb 2017).

QUINTEROS, J. From seismic stations to integrated datacenters and computational facilities. In *Large Scale Data Management and Analysis (LSDMA) Symposium* (Karlsruhe, Germany, Nov 2015).

QUINTEROS, J. ¿Por qué se desacelera la convergencia entre Nazca y Sudamérica desde el Neógeno? Una nueva perspectiva desde los modelos numéricos de subducción. In *IDEAN Seminaries* (Buenos Aires, Argentina, Oct 2012), Instituto de Estudios Andinos - Universidad de Buenos Aires.

QUINTEROS, J. Did the Andes slow down the convergence between Nazca and South America? Insight from numerical models of subduction. In *Goldschmidt lecture series* (Trondheim, Norway, Dec 2010), NGU - Geological Survey of Norway.

QUINTEROS, J. Constraining nature. Insight from numerical models of subduction. In *Seminaries of Geodynamic* (Prague, Czech Republic, Nov 2010), Institute of Geophysics - Charles University in Prague.

QUINTEROS, J. Viscosity in the transition zone - Constraints from numerical models. In *c2c Project - Core to Crust: the fate of subducted material* (Trondheim, Norway, Jun 2010). Keynote speaker.

QUINTEROS, J. Numerical modelling of Plate Tectonics - The whole world inside equations. In *Jornadas sobre Estructuras en las Ciencias* (Buenos Aires, Argentina, Nov 2006), Cátedra Walter Gropius (FADU-UBA) y el Servicio Alemán de Intercambio Académico (Deutscher Akademischer Austauschdienst).

QUINTEROS, J., JACOVKIS, P. M., AND RAMOS, V. A. Efectos de la erosión en el levantamiento de los Andes: un modelo matemático. In *Segundas Jornadas sobre Ecuaciones Diferenciales, Optimización y Análisis Numérico* (Córdoba, Argentina, Mar 2005), Proyecto "Partial Differential Equations and Numerical Optimization with Applications", subsidiado por la Fundación Antorchas.

Awards

Doctoral scholarship financed by the National Council for Scientific and Technical Research (CONICET) - (Apr-2004 / Mar-2008).

QUINTEROS, J. Asignación óptima de bits en la cuantización de la transformada wavelet y multiwavelet, May 2003. Best National Thesis Prize - EST'03 in the $32^{nd}$ International Conference on Computer Science and Operational Research (JAIIO 2003).