

Personal information

Surname(s) / First name(s) **Quinteros, Javier**
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Nationality(-ies) German, Argentine
Date of birth 17.05.1973



Professional experience and background

- 2013–present
Position GEOFON Data Centre Manager
Description Implementation of internationally recognized best practices for data centres at GEOFON (RDA/EUDAT 2020/EOSC). Definition of a Data Management Plan for GEOFON and enforcement of written policies at all operational levels (EUDAT 2020/EOSC-Pillar). New architecture of the EIDA next generation platform (EIDA/EPOS) as well as services for the management of Scientific Data (EUDAT 2020/EOSC-hub/EOSC-Pillar). Representative of Department 2 at the **Arbeitskreis Softwareentwicklung** and the **Strategiekommision Forschungsdatenmanagement** am GFZ, as well as member of the **GFZ Datenmanagementkommission**.
- 2008–2013
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 lithospheric deformation or deep subduction. However, some studies have also been made in the scale of millimetric deformation.
- 2008
Research on Finite element method applied to geodynamics.
Supervisors 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
Supervisors 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) - [University of Buenos Aires](#)

Teaching experience

- 2016 **Lecturer** - Helmholtz Virtual Institute Dead Sea Research Venue
[DESERVE Winter School](#)
- 2016 **Lecturer** - International Centre for Theoretical Physics
[School on Seismology beyond Textbooks](#)
- 2015 **Invited Professor** - University of Buenos Aires (FCEN)
Introduction to thermo-mechanical modelling for geodynamics
- 2015 **Lecturer** - Badan Meteorologi, Klimatologi, dan Geofisika (BMKG)
Waveform Archive Access and Administration
- 2015 **Lecturer** - Geo.X Second SULU Workshop
[SeisComP3 for data handling and analysis](#)
- 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 Data Management Plans, Data and Software Licenses, iRODS, Persistent Identifiers, Cloud solutions, Automatic Workflows, AAI solutions.
- Programming Languages Python, C, C++, MPI, Matlab, Octave, UNIX shell scripting, SQL and others.

Others

- 2020 **Chair of Session in ESC-2020** - S03-Challenges due to massive generation of seismic data. Large-N experiments, fiber optic cables, and how users, data centres and applications will cope with data in the near future.
- 2018 **Chair of Session in ESC-2018** - S03-From site selection to data publication in data Life Cycle in Seismology.
- 2015–2020 **PhD Supervision** - Matías Barrionuevo. *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, 2020.
- 2008–2009 **Master Thesis Supervision** - Gabriel H. Bursztyn. 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.
- Experience as Reviewer The Andes - Active subduction orogeny. Springer Verlag (2006).
Earth and Planetary Science Letters.
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). Deutsches GFZ Potsdam, Germany.
Helle Pedersen (helle.pedersen@univ-grenoble-alpes.fr). ISTerre, Université Grenoble-Alpes, France.

Andrey Babeyko (babeyko@gfz-potsdam.de). Deutsches GFZ Potsdam, Germany.

Victor 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.

Pablo M. Jacovkis (jacovkis@dc.uba.ar). Computer Sciences Department. Universidad de Buenos Aires.

Third party Projects

- 2019-2022 *EOSC-Pillar*. Coordination and Harmonisation of National and Thematic Initiatives to support EOSC
Funding Agency: H2020
- 2017-2020 *RISE*. Real-time Earthquake Risk Reduction for a Resilient Europe
Funding Agency: H2020
- 2017-2020 *SERA*. Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe
Funding Agency: H2020
- 2018-2019 *Geo-data-node*. Aufbau eines fachspezifischen Datenknotenpunkts
Funding Agency: BMBF
Position: GEOFON Data Expert.
- 2018-2020 *EOSC-hub*. European Open Science Cloud Hub
Funding Agency: FP7
Position: GEOFON Data Expert.
- 2015-2019 *EPOS-IP*. European Plate Observing System - Implementation Phase
Funding Agency: H2020
Position: GEOFON Data Expert.
- 2015-2020 Univ. of Potsdam/GeoForschungsZentrum
Surface processes, Tectonics and Georesources: The Andean foreland basin of Argentina (StRATEGy).
Speaker: Prof. Dr. Manfred Strecker.
Funding Agency: DFG
Category: Co-PI of subproject.
- 2015-2018 *EUDAT2020*.
Funding Agency: H2020
Category: Service Integrator / Development Group.

2013-2016	Helmholtz International Research Group <i>Geodynamic Evolution of the Neuquen Andes: Implications for Geo-Resources.</i> Funding Agency: Helmholtz Association Category: PI / Head of the research group.
2013-2014	NERA. Network of European Research Infrastructures for Earthquake Risk Assessment and Mitigation Funding Agency: FP7 Category: Developer.
2008	UBACyT - Univ. of Buenos Aires <i>Computational Methods in some topics of continuum mechanics.</i> Director: Prof. Dr. Pablo Jacovkis. Category: Researcher.
2004-2007	UBACyT - Univ. of Buenos Aires, Code: X-160 <i>Tectonic processes related to subduction. Comparative analysis.</i> Director: Prof. Dr. Víctor Ramos. Category: Research Assistant.
2004-2007	PICT - FONCYT, Code: 26001 <i>Wavelets and Neural Networks: Integrated Approaches and Applications.</i> Director: Prof. Dr. Ana M. C. Ruedin and Prof. Dr. Enrique Segura. Category: PhD Student.

Scientific Publications

Peer-reviewed full articles

Angelo Strollo, Winfried Hanka, Joachim Saul, Andres Heinloo, Susanne Hemmleb, Peter Evans, Javier Quinteros, Thomas Zieke, Karl-Heinz Jaeckel, and Frederik Tilmann. GEOFON: GeoForschungsNetz. *Journal of Large-scale Research Facilities*, In preparation, 2020.

Matías Barrionuevo, Sibiao Liu, José Francisco Mescua, Daniel Yagupsky, Javier Quinteros, Laura Beatriz Giambiagi, Stephan Sobolev, Manfred Strecker, and Constanza Rodríguez Piceda. The impact of inherited crustal features and lithospheric thickness on the evolution of the southern central andean deformation: Insights from geodynamic models. *International Journal of Earth Sciences*, Under Review, Submitted.

Lucas Fennel, Javier Quinteros, and Andrés Folguera. *The Oligo-Miocene Tectonic Mode Switch: From a Brief Period of Widespread Extension to the Final Closure of the Neuquén Basin*, pages 417–429. Springer International Publishing, Cham, 2020. doi:10.1007/978-3-030-29680-3_17.

Riccardo Zaccarelli, Dino Bindi, Angelo Strollo, Javier Quinteros, and Fabrice Cotton. Stream2segment: an open source tool for downloading, processing and visualizing massive event-based seismic waveform datasets. *Seismological Research Letters*, 90:2028–2038, 2019. doi:10.1785/0220180314.

Vasily Bunakov, Alexander Atamas, Alexia de Casanove, Pascal Dugénie, Rene van Horik, Simon Lambert, Javier Quinteros, and Linda Reijnhoudt. Data Curation Policies and Data Provenance in EUDAT Collaborative Data Infrastructure. In Leonid Kalinichenko, Yannis Manolopoulos, Oleg Malkov, Nikolay Skvortsov, Sergey Stupnikov, and Vladimir Sukhomlin, editors, *Data Analytics and Management in Data Intensive Domains*, Communications in Computer and Information Science, pages 249–263, Cham, 2018. Springer International Publishing. doi:10.1007/978-3-319-96553-6_18.

Marzieh Baes, Stephan V. Sobolev, and Javier Quinteros. Subduction initiation in mid-ocean induced by mantle suction flow. *Geophysical Journal International*, 215:1515–1522, 2018. doi:10.1093/gji/ggy335.

Harald Schuh, James Anderson, Georg Beyerle, Galina Dick, Frank Flechtner, Christoph Förste, Maorong Ge, Susanne Glaser, Robert Heinkelmann, Rolf König, Benjamin Männel, Ingo Michaelis, Javier Quinteros, Markus Ramatschi, Jan Rauberg, Martin Rother, Torsten Schmidt, Claudia Stolle, and Jens Wickert. Big data in geodäsie, seismologie und geomagnetismus. *System Erde*, 8:40–47, 2018. doi:10.2312/GFZ.syserde.08.01.6.

Lucas M. Fennel, Javier Quinteros, Sofía B. Iannelli, Vanesa D. Litvak, and Andrés Folguera. The role of the slab pull force in the late oligocene to early miocene extensional regime in the central andes (27°–46°s): Insights from numerical modeling. *Journal of South-American Earth Sciences*, Online since Feb 1st 2018, 2018. doi:10.1016/j.jsames.2017.12.012.

Daniel Melnick, Marcos Moreno, Javier Quinteros, Juan Carlos Baez, Zhiguo Deng, Shaoyang Li, and Onno Oncken. The super-interseismic phase of the megathrust earthquake cycle in Chile. *Geophysical Research Letters*, 44:784–791, 2017. doi:10.1002/2016GL071845.

Daria Cyprych, Sascha Brune, Sandra Piazzolo, and Javier Quinteros. Strain localization in polycrystalline material with second phase particles: Numerical modeling with application to ice mixtures. *Geochemistry, Geophysics, Geosystems*, 17:3608–3628, 2016. doi:10.1002/2016GC006471.

- Peter D. Cliff, Sascha Brune, and Javier Quinteros. Climate changes control offshore crustal structure at South China Sea continental margin. *Earth and Planetary Science Letters*, 420:66–72, 2015. doi:10.1016/j.epsl.2015.03.032.
- Erik Duesterhoeft, Javier Quinteros, Roland Oberhaensli, Romain Bousquet, and Christian de Capitani. Relative impact of mantle densification and eclogitization of slabs on subduction dynamics: a numerical thermodynamic/thermokinematic investigation of metamorphic density evolution. *Tectonophysics*, 637:20–29, 2014. doi:10.1016/j.tecto.2014.09.009.
- Javier Quinteros and Stephan V. Sobolev. Why has the Nazca plate slowed since the Neogene? *Geology*, 41(1):31–34, 2013. doi:10.1130/G33497.1.
- Daniel Melnick, Yannick Garcin, Javier Quinteros, Manfred R. Strecker, Daniel Olago, and Jean-Jacques Tiercelin. Steady rifting in northern Kenya inferred from deformed Holocene lake shorelines of the Suguta and Turkana basins. *Earth and Planetary Science Letters*, 331–332:335–346, 2012. doi:10.1016/j.epsl.2012.03.007.
- Javier Quinteros and Stephan V. Sobolev. Constraining kinetics of metastable olivine in Marianas slab from seismic observations and dynamic models. *Tectonophysics*, 526–529:48–55, 2012. doi:10.1016/j.tecto.2011.11.005.
- Alejandro D. Otero and Javier Quinteros. General parallel finite/spectral-element oriented C/C++ framework. In P. Iványi and B. H. V. Topping, editors, *Proceedings of the Second International Conference on Parallel, Distributed, Grid and Cloud Computing for Engineering*. Civil-Comp Press, Stirlingshire, UK, 2011. Paper 68. doi:10.4203/ccp.95.68.
- Javier Quinteros, Stephan V. Sobolev, and Anton A. Popov. Viscosity in transition zone and lower mantle. Implications for slab penetration. *Geophysical Research Letters*, 37:L09307, 2010. doi:10.1029/2010GL043140.
- Matías C. Ghiglione, Javier Quinteros, Daniel Yagupsky, Pedro Bonillo-Martínez, Julio Hlebszevitch, Víctor A. Ramos, Gustavo Vergani, Daniel Figueroa, Santiago Quesada, and Tomás Zapata. Structure and tectonic history of the foreland basins of southernmost South America. *Journal of South American Earth Sciences*, 29(2):262–277, 2010. doi:10.1016/j.jsames.2009.07.006.
- Gabriel H. Bursztyn, Javier Quinteros, and Alejandro D. Otero. An object oriented version of the Kinematic Laplacian Equation Method. In Eduardo Dvorkin, Marcela Goldschmit, and Mario Storti, editors, *Mecánica Computacional*, volume XXIX, pages 2095–2110. Buenos Aires, Argentina, 2010.
- Javier Quinteros and Alejandro D. Otero. Towards parallel solution of continuous problems by means of a general finite/spectral-element oriented C/C++ framework. In 39° *International Conference on Computer Science and Operational Research*, pages 3195–3210. Buenos Aires, Argentina, 2010.
- Javier Quinteros, Víctor A. Ramos, and Pablo M. Jacovkis. An elasto-visco-plastic model using the finite element method for crustal and lithospheric deformation. *Journal of Geodynamics*, 48(2):83–94, 2009. doi:10.1016/j.jog.2009.06.006.
- Gabriel H. Bursztyn, Alejandro D. Otero, and Javier Quinteros. Una nueva implementación para las ecuaciones de Navier-Stokes mediante KLE y elementos espectrales. In *Mecánica Computacional*, volume XXVII, pages 2367–2383. San Luis, Argentina, 2008.

Javier Quinteros and Martín V. Kind. A wavelet-based methodology for data integration in reservoir modeling. In Pablo Agraz, Claudio Larriestra, Horacio Verdur, Aldo Montagna, and José Massaferró, editors, *Modelado Geológico*, pages 239–261. Instituto Argentino del Petróleo y del Gas, Mar del Plata, Argentina, 2008.

Javier Quinteros, Pablo M. Jacovkis, and Víctor A. Ramos. Diseño flexible y modular de modelos numéricos basados en Elementos Finitos. In Sergio A. Elaskar, Elvio A. Pilotta, and Germán A. Torres, editors, *Mecánica Computacional*, volume XXVI, pages 1724–1740. Córdoba, Argentina, 2007.

Martín V. Kind and Javier Quinteros. History-Matched Reservoir Model Validation based on Wavelets Methods. In *2007 SPE Latin American and Caribbean Petroleum Engineering Conference*, page 11 pp. Buenos Aires, Argentina, Apr 2007. doi:10.2118/108124-MS.

Javier Quinteros, Pablo M. Jacovkis, and Víctor A. Ramos. Evolution of the Upper Crustal Deformation in Subduction Zones. *Journal of Applied Mechanics*, 73(6):984–994, 2006. doi:10.1115/1.2204962.

Javier Quinteros, Pablo M. Jacovkis, and Víctor A. Ramos. Formación de cordilleras y delaminación litosférica. un modelo elasto-visco-plástico mediante elementos finitos. In Alberto Cardona, Norberto Nigro, Victorio Sonzogni, and Mario Storti, editors, *Mecánica Computacional*, volume XXV, pages 2669–2686. Santa Fe, Argentina, 2006.

Javier Quinteros, Víctor A. Ramos, and Pablo M. Jacovkis. Modelado Numérico para la deformación de la corteza superior en los Andes Australes. *Revista de la Asociación Geológica Argentina*, 60(4):714–723, 2005.

Javier Quinteros, Pablo M. Jacovkis, and Víctor A. Ramos. Modelado numérico del levantamiento orogénico y su potencial relación con clima y erosión. In Gustavo C. Buscaglia, Enzo A. Dari, and Oscar M. Zamonsky, editors, *Mecánica Computacional*, volume XXIII, pages 2923–2931. Bariloche, Argentina, Nov 2004.

Javier Quinteros and Ana M. C. Ruedin. Minimization of errors in L4-norm for decoding quantized data: its application to quantization of wavelet coefficients. In *33° International Conference on Computer Science and Operational Research*, Córdoba, Argentina, Sep 2004.

Javier Quinteros and Ana M. C. Ruedin. Quantization of wavelet coefficients. In *32° International Conference on Computer Science and Operational Research*, Buenos Aires, Argentina, Sep 2003.

Technical and Data Reports

Angelo Strollo, Peter Evans, Andres Heinloo, Susanne Hemmleb, Laura Hillmann, K.-H. Jäckel, J. Quinteros, Joachim Saul, R. Zaccarelli, Thomas Zieke, and Frederik Tilmann. GEOFON Annual Report 2019. Scientific technical report str, GFZ German Research Centre for Geosciences, Potsdam, 2020. doi:10.2312/GFZ.b103-20035.

Boris Radosavljevic, Roland Bertelmann, Kirsten Elger, Christian Haberland, Susanne Hemmleb, Gerard Muñoz Soler, Javier Quinteros, and Angelo Strollo. Report on the survey of digital data management practices at the GFZ german research centre for geosciences. Technical report, Helmholtz Centre Potsdam GFZ German Research Centre for Geosciences, 2019. doi:10.2312/gfz.b103-19029.

Boris Radosavljevic, Javier Quinteros, Roland Bertelmann, Susanne Hemmleb, Kirsten Elger, Christian Haberland, Gerard Muñoz, and Angelo Strollo. Survey of Digital Data Management Practices at the GFZ German Research Centre for Geosciences, 2019. doi:10.5880/GFZ.LIS.2019.001.

Tobias Weigel, Bridget Almas, Frederik Baumgardt, Thomas Zastrow, Ulrich Schwardmann, Maggie Hellström, Javier Quinteros, and Dirk Fleischer. Recommendation on research data collections. Technical report, Research Data Alliance, Submitted. doi:10.15497/RDA00022.

Published Software

Javier Quinteros. Routing service: A data centre federation for the seismological community. v1.1.1. GFZ German Research Center for Geosciences, 2017. doi:10.5880/gfz.2.4.2017.001.

Marcelo Bianchi, Peter L. Evans, Andres Heinloo, and Javier Quinteros. WebDC3 Web Interface. GFZ German Research Center for Geosciences, 2015. doi:10.5880/GFZ.2.4/2016.001.

Extended and short abstracts

Carlo Cauzzi, Jarek Bieńkowski, Susana Custódio, Christos Evangelidis, Philippe Guéguen, Christian Haberland, Florian Haslinger, Giovanni Lanzano, Thomas Meier, Alberto Michelini, Lars Ottemöller, Helle Pedersen, Javier Quinteros, Reinoud Sleeman, Angelo Strollo, , and Luca Trani. ORFEUS Services for Coordinated High-Quality Seismic Waveform Data Access in Pan-Europe. In *Geophysical Research Abstracts*, volume EGU2020-8389, Vienna, Austria, Apr 2020. doi:10.5194/egusphere-egu2020-8389.

Reinoud Sleeman, Carlo Cauzzi, Susana Custódio, Christos Evangelidis, Philippe Guéguen, Florian Haslinger, Lucia Luzi, Thomas Meier, Helle Pedersen, Javier Quinteros, and Frederik Tilmann. ORFEUS - the european infrastructure for high-quality seismic waveform data. In *IUGG 2019*, volume IUGG19-4640, Montreal, Canada, July 2019.

Reinoud Sleeman, Florian Haslinger, Helle Pedersen, and Javier Quinteros. Attribution, licensing and metadata for EPOS seismological waveform data. In *IUGG 2019*, volume IUGG19-4617, Montreal, Canada, July 2019.

Boris Radosavljevic, Kirsten Elger, Damian Ulbricht, Christian Haberland, Javier Quinteros, and Roland Bertelmann. A Roadmap for Research Data Management in the Geosciences: Responding to Community Needs. In *GeoMünster 2019*, volume In Press, Münster, Germany, September 2019.

Javier Quinteros, Daniel Armbruster, Massimo Fares, Stefan Heimers, Andres Heinloo, Mathias Hoffmann, Philippe Kaestli, Mathijs Koymans, Erich O. Muhire, Cristian Neagoe, Mehmet Ozer, Catherine Pequegnat, Jonathan Schaeffer, Luca Trani, and Nikolaos Triantafyllis. New federated seismological services within EIDA. In *Geophysical Research Abstracts*, volume EGU2019-13810, Vienna, Austria, Apr 2019.

Carlo Cauzzi, Susana Custódio, Christos Evangelidis, Philippe Guéguen, Florian Haslinger, Lucia Luzi, Thomas Meier, Helle Pedersen, Javier Quinteros, Reinoud Sleeman, and Frederik Tilmann. ORFEUS Portfolio: the Gateway to High-Quality Seismic Data in Europe. In *Geophysical Research Abstracts*, volume EGU2019-10116, Vienna, Austria, Apr 2019.

Luca Trani, Massimo Fares, João Paulo Pereira Zanetti, Javier Quinteros, and Nikolaos Triantafyllis. Building the EPOS-ORFEUS Competence Center in EOSC-hub. In *Geophysical Research Abstracts*, volume EGU2019-16013, Vienna, Austria, Apr 2019.

Javier Quinteros, Susanne Hemmleb, and Angelo Strollo. Data policies definition for a seismological data centre. the geofon example. In *36th General Assembly of the European Seismological Commission*, Valletta, Malta, Sept 2018.

Boris Radosavljevic, Roland Bertelmann, Kirsten Elger, Christian Haberland, Susanne Hemmleb, Gerard Muñoz, Javier Quinteros, and Angelo Strollo. Geodatanode: Applying lessons from data management beyond the seismological community. In *36th General Assembly of the European Seismological Commission*, Valletta, Malta, Sept 2018.

Mathijs Koymans, Massimo Fares, Luca Trani, Javier Quinteros, and Cristian Nagoe. FAIRytale - towards FAIR seismological data management in the European Integrated Data Archive (EIDA). In *36th General Assembly of the European Seismological Commission*, Valletta, Malta, Sept 2018.

Carlo Cauzzi, John Clinton, Susana Custódio, Florian Haslinger, Lucia Luzi, Thomas Meier, N. Melis, Alberto Michelini, Helle Pedersen, Javier Quinteros, Reinoud Sleeman, and Frederik Tilmann. Orfeus data services and products: the cornerstone of seismic data distribution in europe. In *36th General Assembly of the European Seismological Commission*, Valletta, Malta, Sept 2018.

Vasily Bunakov, Javier Quinteros, and Linda Reijnhoudt. Data provenance service prototype for collaborative data infrastructure. In *Fourth International Conference on Big Data, Small Data, Linked Data and Open Data*, page in Press, Athens, Greece, April 2018.

Sibiao Liu, Stephan Sobolev, and Javier Quinteros. Foreland deformation in Altiplano-Puna Plateau: Insights from 3D numerical simulations of the orogen-foreland system. In *Geophysical Research Abstracts*, volume EGU2018-7349-1, Vienna, Austria, Apr 2018.

Kirsten Elger, Damian Ulbricht, Roland Bertelmann, and Javier Quinteros. Data, samples, software, texts - publishing services at gfz german research centre for geosciences. In *Geophysical Research Abstracts*, volume EGU2018-14323, Vienna, Austria, Apr 2018.

Henry Wichura, Javier Quinteros, and Sascha Brune. Formation of Lake Victoria during coeval rifting in East Africa: a 3-D thermomechanical modeling approach. In *Geophysical Research Abstracts*, volume EGU2018-8516, Vienna, Austria, Apr 2018.

Vasily Bunakov, Alexia de Casanove, Pascal Dugenie, Rene van Horik, Simon Lambert, Javier Quinteros, and Linda Reijnhoudt. Data curation policies for EUDAT collaborative data infrastructure. In *Data Analytics and Management in Data Intensive Domains*, pages 72–78, Moscow, Russia, Oct 2017.

Angelo Strollo, Joachim Saul, Javier Quinteros, Peter Evans, Riccardo Zaccarelli, Andres Heinloo, Susanne Hemmleb, Thomas Zieke, Michael Guenther, Karl-Heinz Jaeckel, Winfried Hanka, and Frederik Tilmann. GEOFON services for the german geophysical community. In *77. Jahrestagung der Deutschen Geophysikalischen Gesellschaft e.V.*, volume A-524, Potsdam, Germany, Apr 2017.

Giovanni Morelli, Massimo Fares, Luca Trani, and Javier Quinteros. EPOS as one of the actors in the EUDAT's engagement with the Earth Sciences. In *Geophysical Research Abstracts*, volume EGU2017-19651, Vienna, Austria, Apr 2017.

Luca Trani, M. Koymans, Javier Quinteros, Andres Heinloo, Fabian Euchner, Angelo Strollo, Reinoud Sleeman, John Clinton, Klaus Stammer, Peter Danecek, Helle Pedersen, C. Ionescu, A. Pinar, and C. Evangelidis. The European seismological waveform framework EIDA. In *Geophysical Research Abstracts*, volume EGU2017-13770, Vienna, Austria, Apr 2017.

S. Liu, S. V. Sobolev, A. Y. Babeyko, F. Krueger, J. Quinteros, and A. Popov. First results of high-resolution modeling of Cenozoic subduction orogeny in Andes. In *AGU Fall Meeting Abstracts*, volume 2016, pages T31A–2881, December 2016.

Lucas Martín Fennell, Marius Walter, Javier Quinteros, and Andrés Folguera. Late Oligocene - Early Miocene extension in the Central Andes: insights from numerical modeling. In *Primer Simposio de Tectónica Sudamericana*, volume In Press, Santiago, Chile, Nov 2016.

Javier Quinteros, Andres Heinloo, Beatrix Weber, Lukas Hämmerle, and Wolfgang Pempe. A novel AAI approach for the European Integrated Data Archive within EPOS. In *Digital Infrastructure for Research 2016*, Krakow, Poland, Sept 2016. URL: <https://www.digitalinfrastructures.eu/content/novel-aa-approach-european-integrated-data-archive-within-epos>.

Javier Quinteros, Susanne Hemmleb, Peter Evans, Andres Heinloo, and Angelo Strollo. Latest developments at GEOFON Data Centre. In *35th General Assembly of the European Seismological Commission*, Trieste, Italy, Sept 2016.

Aurélien Dupont, Andres Heinloo, Rémy Bossu, Joachium Saul, Gilles Mazet-Roux, Angelo Strollo, Frédéric Rousel, Peter Evans, and Javier Quinteros. 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 Commission*, Trieste, Italy, Sept 2016.

Javier Quinteros, Peter Evans, Angelo Strollo, Damian Ulbricht, Kirsten Elger, and Roland Bertelmann. Moving towards persistent identification in the seismological community. In *Geophysical Research Abstracts*, volume 18, Vienna, Austria, Apr 2016.

Henry Wichura, Javier Quinteros, Daniel Melnick, Sascha Brune, Wolfgang Schwanghart, and Manfred R. Strecker. Evolution of the lake victoria basin in the context of coeval rift initiation in east africa: a 3d numerical model approach. In *Exkursionsführer und Veröffentlichungen der Deutschen Gesellschaft für Geowissenschaften*, volume 255, page 397, Berlin, Germany, Apr 2015.

Matías Barrionuevo, José Mescua, Javier Quinteros, and Laura Giambiagi. 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.

M. J. Walter, J. Quinteros, and S. V. Sobolev. Numerical modeling of fluid migration in subduction zones. In *AGU Fall Meeting Abstracts*, volume 2015, pages V43A–3098, December 2015.

P. D. Clift, S. Brune, and J. Quinteros. Climate modulated erosion and sediment flux control offshore crustal structure at South China Sea continental margin. In *AGU Fall Meeting Abstracts*, volume 2015, pages T42C–07, December 2015.

Daria Czaplinska, Sascha Brune, and Javier Quinteros. Strain localisation in two-phase materials: Insights from centimetre-scale numerical models and laboratory experiments with ice mixtures. In *2015 Fall Meeting*, volume In Press, San Francisco, Calif., Dec 2015. AGU.

Peter D. Clift, Sascha Brune, and Javier Quinteros. Climate modulated erosion and sediment flux control offshore crustal structure at south china sea continental margin. In *Geological Society of America Abstracts with Programs*, volume 47–32, Baltimore, Maryland, USA, Nov 2015. GSA.

Angelo Strollo, Javier Quinteros, Reinoud Sleeman, Luca Trani, John Clinton, Klaus Stammler, Peter Danecek, Helle Pedersen, and Constantin Ionescu. EIDA Next Generation: ongoing and future developments. In *Geophysical Research Abstracts*, volume 17, page 9924, Vienna, Austria, Apr 2015.

Marius J. Walter, Javier Quinteros, and Stephan V. Sobolev. Numerical modeling of fluid migration in subduction zones. In *Geophysical Research Abstracts*, volume 17, page 8532, Vienna, Austria, Apr 2015.

Henry Wichura, Javier Quinteros, Daniel Melnick, Sascha Brune, Wolfgang Schwanghart, and Manfred R. Strecker. 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*, volume 17, page 5950, Vienna, Austria, Apr 2015.

Sascha Brune, Peter D. Cliff, and Javier Quinteros. Anomalous subsidence at South China Sea rifted margin: Sediments digging their own hole. In *Geophysical Research Abstracts*, volume 17, page 8172, Vienna, Austria, Apr 2015.

Cedric Thieulot, Susanne Buitter, Sascha Brune, Rhodri Davies, Thibault Duretz, Muriel Gerbault, Anne Glerum, Javier Quinteros, Stefan Schmalholz, and Wim Spakman. A two- and three-dimensional numerical comparison study of slab detachment. In *Geophysical Research Abstracts*, volume 17, page 9255, Vienna, Austria, Apr 2015.

Marius Walter, Javier Quinteros, and Stephan V. Sobolev. Implementing fluid flow in SLIM-3D. In K. Elger, O. T. Haug, and M. Ritter, editors, *Proceedings of GeoMod2014 - Modelling in Geosciences: Programme and Extended Abstracts*, Potsdam, Germany, Sep 2014.

Erik Duesterhoeft, Javier Quinteros, Roland Oberhaensli, and Romain Bousquet. 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.

Javier Quinteros and Joachim Saul. 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.

Marcos Moreno, J. C. Baez, John Bedford, Javier Quinteros, Andrés Tassara, Daniel Melnick, Onno Oncken, C. Vigny, M. Bartsch, Matthias Rosenau, H. Soto, M. Bevis, and S. Barrientos. Did the 2010 Chile earthquake change the locking degree at neighboring plate interface segments of the Andean subduction zone? In *Geophysical Research Abstracts*, volume EGU2014-12221, Vienna, Austria, Apr 2014.

Matthieu Quinquis, Susanne Buitter, Nicola Tosi, Cédric Thieulot, Petra Maierová, and Javier Quinteros. A numerical model setup for subduction: From linear viscous to thermo-mechanical rheologies. In *Geophysical Research Abstracts*, volume 15, pages EGU2013-7255-1, Vienna, Austria, Apr 2013.

Javier Quinteros and Stephan V. Sobolev. Why does the convergence rate between Nazca and South America slow since the Neogene? In *2012 Fall Meeting*, volume T43F-2738, San Francisco, Calif., Dec 2012. AGU.

Javier Quinteros and Stephan V. Sobolev. 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.

Javier Quinteros and Stephan V. Sobolev. Kinetics of metastable olivine constrained by seismic observations and dynamic models. In *12th Workshop on Mantle Convection and Lithospheric dynamics*, Potsdam, Germany, Aug 2011.

Javier Quinteros and Stephan V. Sobolev. Viscosity in transition zone and lower mantle constrained by numerical models. In *12th Workshop on Mantle Convection and Lithospheric dynamics*, Potsdam, Germany, Aug 2011.

Javier Quinteros and Stephan V. Sobolev. Viscosity in transition zone and shallow lower mantle - Insight from numerical models of subduction. In *Geophysical Research Abstracts*, volume 13, pages EGU2011–12447, Vienna, Austria, Apr 2011.

Javier Quinteros and Stephan V. Sobolev. Did growth of high Andes slow down Nazca plate subduction? In *2010 Fall Meeting*, volume T11A-2040, San Francisco, Calif., Dec 2010. AGU.

Javier Quinteros and Stephan V. Sobolev. 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.

Javier Quinteros and Stephan V. Sobolev. The role of fluids in the subduction channel: towards a new thermomechanical model. In *11th Workshop on Mantle Convection and Lithospheric dynamics*, pages 91–92, Braunwald, Switzerland, Jun 2009.

Javier Quinteros and Stephan V. Sobolev. Towards a new thermomechanical model of subduction channel. In *Geophysical Research Abstracts*, volume 11, pages EGU2009–8684, Vienna, Austria, Apr 2009.

Javier Quinteros, Víctor A. Ramos, and Pablo M. Jacovkis. Constraints on delamination from numerical models. In *7° International Symposium on Andean Geodynamics*, pages 417–420, Nice, France, Sep 2008. IRD Éditions.

Javier Quinteros, Víctor A. Ramos, and Pablo M. Jacovkis. Estudio de la delaminación cortical en un orógeno mediante un modelo numérico. In *XIII Reunión de Tectónica*, pages 49–49, San Luis, Argentina, Oct 2006.

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

Javier Quinteros, Víctor A. Ramos, and Pablo M. Jacovkis. A finite element model for the early to middle Miocene evolution of the Patagonian Andes at 47°s. In *6° International Symposium on Andean Geodynamics*, pages 582–585, Barcelona, Spain, 2005. IRD Éditions.

Javier Quinteros, Víctor A. Ramos, and Pablo M. Jacovkis. Numerical model for Upper Crustal deformation. In *Actas del XVI Congreso Geológico Argentino*, volume 1, pages 415–420, La Plata, Argentina, Sep 2005.

Matías C. Ghiglione, Javier Quinteros, Julio Hlebszevitsch, Daniel Yagupsky, Claudio Haring, and Gustavo Vergani. Cuencas del extremo Austral de la Placa Sudamericana: Diferencias, conexiones y una historia en común. In *Actas del XVI Congreso Geológico Argentino*, volume 1, pages 201–206, La Plata, Argentina, Sep 2005.

Javier Quinteros, Víctor A. Ramos, and Pablo M. Jacovkis. Miocene crustal deformation in Southern Patagonian Andes and the rain-shadow effect - Argentina and Chile. In GeoUnion Alfred-Wegener-Stiftung, editor, *Terra Nostra*, volume 1, pages 95–95, Potsdam, Germany, Apr 2005.

Javier Quinteros and the GEOFON Team. The GEOFON experience and posible collaborations with Armenia. In *4th Eastern Partnership E-Infrastructure Conference*, Yerevan, Armenia, September 2019. EaPConnect.

Invited speaker in Scientific Meetings

Javier Quinteros and the GEOFON Team. Selecting an appropriate license for open data. the geofon experience. In *IG RDA/CODATA Legal Interoperability*, Berlin, Germany, Mar 2018. Research Data Alliance - 11th Plenary.

Javier Quinteros and the GEOFON Team. Geofon use case. In *WG Persistent Identification of Instruments*, Berlin, Germany, Mar 2018. Research Data Alliance - 11th Plenary.

Javier Quinteros and the GEOFON Team. Geofon use case. In *WG Research Data Collections*, Berlin, Germany, Mar 2018. Research Data Alliance - 11th Plenary.

Javier Quinteros and the GEOFON Team. Realtime data in seismology. status and challenges for the future. In *Real-Time Data Processing As A New Challenge In Research And Industry*, Berlin, Germany, Mar 2018. Research Data Alliance - 11th Plenary.

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

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

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

Javier Quinteros. 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.

Javier Quinteros. Constraining nature. Insight from numerical models of subduction. In *Seminars of Geodynamic*, Prague, Czech Republic, Nov 2010. Institute of Geophysics - Charles University in Prague.

Javier Quinteros. 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.

Javier Quinteros. 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).

Javier Quinteros, Pablo M. Jacovkis, and Víctor A. Ramos. 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).

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