

8:30 -
9:15

Welcome address (Lecture hall H2)

Lecture hall H2

Subduction zone seismotectonics

Hosted by IPOC and PICTURES
Conveners: H. Kopp, O. Oncken



9:20 - 9:50 Keynote	Structure and geodynamics of the collision zones of the Nazca and Juan Fernández Ridges with South America E. Contreras-Reyes
9:50 - 10:10	Upper plate stress field in the northern Chile forearc from earthquake source mechanisms B. Schurr, L. Lehmann, C. Sippl, W. Bloch
10:10 - 10:30	3D seismic tomography and seismotectonics of the Ecuadorian margin inferred from the 2016 Mw 7.8 Pedernales aftershock sequence S. Leon-Rios, A. Rietbrock, H. Agurto-Detzel, A. Alvarado, A. Meltzer, B. Edwards, C. Lynner, F. Rolandone, J. M. Nocquet, L. Soto-Cordero, M. Regnier, M. Hoskins, M. Ruiz, P. Charvis, S. Beck, Y. Font

Lecture hall H3

Ocean, sediment, and climate dynamics

Conveners: S. Kasemann, G. Schmiedl

9:20 - 9:50 Keynote	Tipping elements of the climate system and marine sediments: The western tropical Atlantic and the adjacent South America C. Chiessi, S. Mulitza, S. Crivellari, C. Häggi, N. Höppner, S. Kasemann, H. Kuhnert, R. Portilho-Ramos, M. Prange, G. Sampaio, A. Sawakuchi, E. Schefuß, I. Voigt, Y. Zhang
9:50 - 10:10	The sediment archive of the western Campeche Bank: From Chicxulub impact to Loop Current evolution C. Hübscher, D. Nürnberg
10:10 - 10:30	"The present is the key to the past": An actualistic study on the foraminiferal assemblages of Albuquerque Cay (Colombian Caribbean) G. D. Patarroyo Camargo, D. F. Gómez González

Lecture hall H4

Crustal evolution of ancient terranes

Conveners: B. Weber, W. Teixeira

9:20 - 9:50 Keynote	The Paleoproterozoic Minas Orogen, São Francisco Craton reviewed: insights into an evolving accretionary-collision orogenic system and global implications W. Teixeira
9:50 - 10:10	Multi-chronometer thermochronological modelling of the Late Neoproterozoic to recent t-T-evolution of the SE coastal region of Brazil F. Krob, U. A. Glasmacher , M. Karl, M. Perner, P. C. Hackspacher, D. F. Stockli
10:10 - 10:30	Coeval Early Ediacaran Breakup of Amazonia, Baltica, and Laurentia: Evidence for a large igneous province from SIMS U-Pb dating of mafic dykes from Mexico. B. Weber, A. Schmitt, A. Cisneros de León, R. González-Guzmán

10:30 -
11:00

Coffee break (Museum)

11:00 - 11:30 Keynote	Present Status and Future Plans for the Chilean Seismic Network S. Barrientos Parras
11:30 - 11:50	Structure of and dynamic processes within the crust of Northern Chile (IPOC area) based on ambient seismic noise correlations and repeating Earthquakes C. Sens-Schönfelder, F. Tilmann , B. Heit, R. Green
11:50 - 12:10	Filling the gap in a double seismic zone: Intraslab seismicity in Northern Chile C. Sippl, B. Schurr, T. John, S. Hainzl
12:10 - 12:30	The Central Andean double seismic zone: seismological constraints on the processes within W. Bloch, T. John, J. Kummerow, B. Schurr, P. Salazar, P. Wigger, S. A. Shapiro

11:00 - 11:30 Keynote	Upper Cretaceous palaeosols as basin analysis proxies: Bauru group (SE Brazil) and Los Llanos formation (NW Argentina) G. Basilici, M. V. Soares Theodoro, F. R. Abrantes Júnior, A. Cardoso Ribeiro
11:30 - 11:50	Autogenic controls on the distribution of sediments and palaeosols in ancient distributive fluvial systems (Bauru basin, Brazil) M. V. Theodoro Soares, G. Basilici, T. da Silva Marinho, A. Guillermo Martinelli, A. Marconato, F. Romério Abrantes Júnior, R. Váscquez Garcia
11:50 - 12:10	Evidences of early Holocene glacial advance in Lachman Beach, James Ross Island, Antarctica; and high latitude linkages in southern hemisphere M. Romero, J. A. Strelin, M. R. Kaplan
12:10 - 12:30	Evidences of permafrost degradation in the Arid Andes and its potential effect on hydrological resources J. P. Milana, L. Schrott, S. Wohnlich

11:10 - 11:30	Uranium zonation refined U-Pb thermochronology – application to the Northern Andes of South America A. Paul, R. A. Spikings, D. Chew, S. J. Daly
11:30 - 11:50	Extension of the Ordovician pre-Andean Famatinian arc in northeastern Mexico: Peregrina tonalite J. A. Ramirez-Fernandez, E. A. Alemán-Gallardo, F. Velasco-Tapia, U. Jenchen, R. Becchio
11:50 - 12:10	PTt-paths of high pressure metamorphic rocks in the Sierra Pie Palo (W-Argentina): evolution of a flat collisional wedge during a "hard" continent-arc collision A. Willner, R. Anczkiewicz, J. Glodny, J. Pohlner, M. Sudo, C. R. van Staal, G. Vujovich
12:10 - 12:30	Multi-chronometer thermochronological modelling of the Late Neoproterozoic to recent t-T-evolution of the Argentine passive continental margin U. A. Glasmacher, S. Kollenz, E. A. Rossello, D. F. Stockli, R. E. Pereyra

Program: Thursday, 19.09.2019 - afternoon sessions

12:30 -
13:30

Lunch break

Lecture hall H2

Subduction earthquake dynamics

Hosted by IPOC and PICTURES

Conveners: B. Schurr, D. Lange



13:30 -
14:00
Keynote

Understanding seismic and tsunami hazards in the Chilean subduction zone: lessons and perspectives from the framework of interdisciplinary studies

G. González L.

14:00 -
14:20

Unveiling giant tsunamigenic earthquakes along the hyperarid Atacama Desert in the major Northern Chile Seismic Gap at multimillennial timescales

G. Vargas, D. Salazar, J. Goff

14:20 -
14:40

Multi-Array Back-Projection: Rupture complexities due to asperities along-dip barriers during the 2007 Mw 7.7 Tocopilla earthquake

F. Vera, F. Tilmann, J. Saul

14:40 -
15:00

Earthquake scaling models applied to seismicity analysis in Chile

C. Siegel, J. Campos, B. Derode, P. Toledo

15:00 -
15:20

Role of Continental Lower Crust Following the 2010 Mw 8.8 Maule Earthquake: Insights from a Power-Law Rheology Model with Dislocation Creep

C. Peña, O. Heidbach, M. Moreno, J. Bedford, M. Ziegler, A. Tassara, O. Oncken

15:20 -
17:30

Coffee & posters day 1 (Museum)

17:30 -
18:30

Evening lecture (Lecture hall H1)

Lecture hall H4

Crustal evolution of ancient terranes

Conveners: B. Weber, W. Teixeira

13:40 -
14:00

Ages and internal structure of plutons in the Dominican segment of the Caribbean Island Arc

B. Härtel, O. Frei, K. P. Stanek

14:00 -
14:20

3D density structure of the Caribbean lithosphere derived from Vertical Gravity Gradients: Implications for regional tectonic boundaries and the characterisation of geohazards

Á. M. Gómez García, C. Meeßen, M. Scheck-Wenderoth, Á. González, G. Monsalve, J. Bott, A. Bernhardt, G. Bernal

14:20 -
14:40

Paleomagnetism of Middle-Late Jurassic Bahía Laura Group (Patagonia, southern Argentina)

V. Ruiz González, C. G. Puigdomenech, E. M. Renda, B. Boltshauser, C. B. Zaffarana, H. Vizán

14:40 -
15:00

Regional depocenter geometry and subsurface frontal structural features in the foothills and western foreland llanos

Sub-Andean basin (Colombia) based on gravimetric modeling

P. N. Morales Hernandez, A. Kammer, J. C. Alzate, M. Garcia

Program: Friday, 20.09.2019 - morning sessions

Lecture hall H2

Climate and erosion in the Andes

Hosted by IRTG-StRATEGy

Conveners: M. Scheck-Wenderoth, M. Strecker



8:30 - 9:00 Keynote	Paleoclimate reconstructions from fluvial sedimentary deposits in an intermontane basin in the southern Central Andes - A case study from the Quebrada del Toro, NW Argentina S. Tofelde , T. Schildgen, M. Strecker, B. Bookhagen, A. Wickert, S. Savi, H. Pingel, H. Wittmann, R. Alonso
9:00 - 9:20	Paleoclimate, Paleoenvironment, and Paleoecology of Neogene Central America: Bridging Continents and Oceans (NICA-BRIDGE) S. Kutterolf , M. Brenner, A. Freundt, J. Kallmeyer, S. Krastel, S. Katsev, A. Meyer, L. Pérez, J. Rausch, A. Saballos, A. Schwalb, W. Strauch
9:20 - 9:40	Deciphering a steep erosional gradient in the hyperarid core of the Atacama Desert, northern Chile J. Mohren , S. A. Binnie, B. Ritter, D. A. Lopez, T. J. Dunai
9:40 - 10:00	Impacts of climate and humans on vegetation in northeastern Brazil during the late Holocene C. Alves de Moraes , H. Behling, M. Accioly Teixeira de Oliveira

10:00 - 10:30

Mountain building and deformation in the Andes

Hosted by IRTG-StRATEGy

Conveners: M. Scheck-Wenderoth, M. Strecker



10:30 - 11:00 Keynote	Interplay between constructive deep mechanisms building the Central Andes and the stress field L. Giambiagi , S. Spagnotto, A. Tassara, J. Suriano, J. Mescua, A. Lossada, M. Barrionuevo, J. Julve
11:00 - 11:20	Deformation and rheology of the Central Andean lithosphere F. Ibarra, C. B. Prezzi , M. L. Gómez Dacal, M. Scheck-Wenderoth, J. Bott, M. Strecker
11:20 - 11:40	Regional transect across the Quirquincho Arch (NW Argentina) V. Cortassa , E. A. Rossello, S. Back, R. Ondrak, M. Strecker
11:40 - 12:00	Full crustal scale deformation structures in the Central Andean Foreland revealed by recent seismotectonic activity. M. Zeckra , G. Aranda Viana, E. J. M. Sutti Criado, A. Arnous, F. Krüger, M. Strecker, F. Hongn

Lecture hall H3

Volcanism and tectonics

Conveners: J. Behrmann, M. Rosenau

8:30 - 9:00 Keynote	The Central and Southern Volcanic Zones of the Andes, what we know and what we do not know I. Petrinovic
9:00 - 9:20	The Quaternary Payún Matrú caldera, andean back-arc of the Southern Volcanic Zone: insights into its caldera-forming eruption deposits I. Hernando , I. Petrinovic, D. Gutiérrez, J. Bucher, T. Fuentes, E. Aragón
9:20 - 9:40	Distributed transpressive deformation in the Southern Andes: Insights from low-temperature geochronology and DEM-analysis P. Göllner , J. O. Eisermann, U. Riller
9:40 - 10:00	Volcano-tectonic analysis at the northern terminus of the Liqueñe-Ofqui Fault Zone (38°S): The Copahue Volcano, Argentina E. Pitzke , P. Göllner, J. O. Eisermann, I. Petrinovic, U. Riller

Coffee break (Museum)

Volcanism and tectonics

Conveners: J. Behrmann, M. Rosenau

10:40 - 11:00	Processes culminating in the 2015 phreatic explosion at Lascar volcano, Chile, monitored by multiparametric data A. Gaete , T. Walter, S. Bredemeyer, M. Zimmer, C. Kujawa, L. Franco, J. San Martin, C. Bucarey Parra
11:00 - 11:20	Hydro-geothermal Circulation Systems in the Central Andes of Argentina – The Example of Pismanta S. Wohnlich , J. Schreuer, I. Hinzer, M. Altherr, I. Sass, R. Schäffer
11:20 - 11:40	Structural control on carbon dioxide diffuse degassing at the Caviahue – Copahue Volcanic Complex, Argentina M. C. Lamberti , N. Vigide, S. Venturi, M. Agosto, D. Yagupsky, D. Winocur, H. Barcelona, M. L. Vélez, F. Tassi

Lecture hall H4

Subduction earthquake dynamics

Hosted by IPOC and PICTURES

Conveners: B. Schurr, D. Lange



8:30 - 9:00 Keynote	Seismic imaging of the source region of great megathrust earthquakes offshore Chile: an overview of recent results A. Tréhu
9:00 - 9:20	Slab hydration: combining constraints from oceanic plate structure and intraslab seismicity J. Geersen , C. Sippel
9:20 - 9:40	Instrumental monitoring of shallow slip events on active faults reveals the ability of velocity weakening behaviour at shallow crustal levels P. Victor , A. Mütting, G. González L., O. Oncken
9:40 - 10:00	Seafloor geodesy to monitor deformation offshore Northern Chile (GeoSEA) D. Lange , H. Kopp, K. Hannemann, F. Petersen, J. Bedford, S. Barrientos, E. Contreras-Reyes

Natural resources

Hosted by Wintershall-DEA

Conveners: M. Mohr, N. Buurman



wintershall dea

10:40 - 11:00	Multistage evolution of a Neoproterozoic quartz-gold vein mineralization, Dom Feliciano orogenic belt, Uruguay G. Sosa , A. Van den Kerkhof, K. Wemmer, F. Paullier, J. Spoturno, P. Oyhançabal
11:00 - 11:20	Bacterially reduced sulfur in organic-rich facies of early Eocene red-beds (Cuzco region, Peru) as trap for copper during migration of basinal fluids S. Rosas
11:20 - 11:40	Hydrogeochemistry and origin of elevated concentrations of fluoride, arsenic and uranium in the area of the San Antonio el Grande mine, Chihuahua / Mexico D. Schwertfeger , A. Cardona Benavides, S. Alonso Torres, A. Banning
11:40 - 12:00	Mapping marine geothermal resources with the magnetotelluric method in the northern Gulf of California T. A. Avilés-Esquivel , C. Flores-Luna, V. Reyes-Ortega, E. Gómez-Treviño, S. Constable, G.-F. Antonio

Program: Friday, 20.09.2019 - afternoon sessions

12:00 -
13:30

Lunch break

Lecture hall H2

Mountain building and deformation in the Andes

Hosted by IRTG-StRATEGy

Conveners: M. Scheck-Wenderoth, M. Strecker



13:30 -
14:00
Keynote

Andean exhumation and erosion across the Pampean flat-slab transition

G. Hoke, A. Lossada, P. Val, L. Giambiagi

14:00 -
14:20

Crustal deformation and loading effects in southern Patagonia

E. Marderwald, A. Richter, L. Mendoza, J. L. Hormaechea, R. Perdomo, A. Groh, M. Horwath, J. M. Aragon Paz, P. Busch, M. Scheinert, M. Kappelsberger, R. Dietrich

14:20 -
14:40

Lithospheric temperature and rheology of the North Patagonian Massif plateau, Argentina.

M. L. Gomez Dacal, M. Scheck-Wenderoth, M. Cacace, E. Aragón, C. Tocho

14:40 -
15:00

Structure of the Argentine passive volcanic continental margin from 3D gravity modelling and isostatic calculations

C. Prezzi, M. A. Arecco, F. Ruiz

Lecture hall H4

Natural resources

Hosted by Wintershall-DEA

Conveners: M. Mohr, N. Buurman



13:30 -
14:00
Keynote

Early evolution of the Gulf of Mexico: Synrift successions, climate, and tectonic setting

R. S. Molina-Garza, J. Pindell, T. F. Lawton

14:00 -
14:20

Palynofacies and maturity offshore Suriname – implications for the petroleum system

B. Holstein, B. Boeckel

14:20 -
14:40

Interplay between salt tectonics and gravitational extension tectonics in the Sureste Basin, Mexico

M. Giba, M. Mohr, C. Schneider

14:40 -
15:00

Carbonate Reservoirs of Brazilian Pre-salt

A. Vidal

15:00 -
15:30
Keynote

Deformation and differential subsidence in the Neuquén Basin, outlines for hydrocarbon exploration

E. Cristallini, R. Tomezzoli, M. Mazzoni, C. Guzmán, N. Hernández

15:30 -
17:30

Coffee & posters day 2 (Museum)

17:30 -
18:00

Concluding remarks (Lecture hall H2)

18:00 -
19:00

Break and transfer to the St. Pauli Landungsbrücken (Port of Hamburg)

19:00 -
22:00

Conference dinner (*Rickmer Rickmers*)