



15-17<sup>th</sup> April, 2019  
Vinhedo - SP / Brazil

# Session Program

3<sup>rd</sup> BRAZILIAN SEISMOLOGY SYMPOSIUM

15-17<sup>th</sup> April 2019

Vinhedo - SP

<https://3sbs.iag.usp.br/>

Organizer Committee:



INSTITUTO DE  
ASTRONOMIA,  
GEOFÍSICA  
E CIÊNCIAS  
ATMOSFÉRICAS



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**General Coordination:**

- Marcelo Belentani de Bianchi (IAG/USP)
- Marcelo Assumpção (IAG/USP)
- Carlos Moreno Chaves (IAG/USP)

**Event Organization and Assistance:**

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- Jordi Julià Casas (Departamento de Geofísica/UFRN)
- Lucas Vieira Barros (Observatório Sismológico/UnB)
- George Sand Leão Araújo de França (Observatório Sismológico/UnB)
- Marcelo Belentani de Bianchi (IAG/USP)
- Carlos Moreno Chaves (IAG/USP)
- Fabio Luiz Dias (ON)



## **Course and Mini Courses:**

### **Pre-symposium course:**

*Date:*

8<sup>th</sup> - 12<sup>th</sup> April 2019 from 09:00 to 13:00 (total of 20 hours)

*Place:*

Instituto de Astronomia, Geofísica e Ciências Atmosféricas, Universidade de São Paulo, Rua do Matão, 1226, São Paulo, SP, CEP. 05508-090 - Brazil

*Signal extraction from noise with polarization and correlation techniques:  
Application to seismic tomography and crustal structure.*

**Martin Schimmel (ICTJA/CSIC/Spain)**

### **Welcome mini course:**

*Date:*

14<sup>th</sup> April 2019 from 14:00 to 18:00 (total of 4 hours)

*Place:*

Casa de Siloé, Rua do Observatório, 538, CEP 13280-000, Vinhedo/SP - Brazil.

*Course 1: Usando o SAC para processamento de sinais em sismologia de forma eficiente.*

**Marcelo Bianchi (IAG/USP/Brazil)**

*Course 2: Função do Receptor: Entendendo a deconvolução, cálculos de espessura e Vp/Vs.*

**Fabio Luiz Dias (ON/Brazil)**



## TECTONIC STRUCTURE ONE (TS-1) / Monday (15th-Apr./2019)

*Chair: Carlos Chaves*

- 08:30 *Global observations of reflectors in the mid-mantle with implications for mantle structure and dynamics; Lauren Waszek (NMSU/USA). (Invited).*

*Chairs: Marcelo Assumpção & Jordi Julià*

- 09:30 *Evaluating the ratio of S-wave to P-wave velocity variation in the lowermost mantle beneath the Central Pacific: Implications for thermochemical interpretations of D"; Carlos A. M. Chaves (USP), Paula Koelemeijer (UCL/UK), Jeroen Ritsema (University of Michigan/USA).*

- 09:45 *Transition zone thickness and its correlation to the Nazca slab position in South America; Marcelo Bianchi (USP), Clinton Koch (UA/USA), Marcelo Assumpção (USP), Susan Beck (UA/USA).*

- 10:00 *Numerical modeling of intraplate stresses of the lithosphere focusing on topography and density heterogeneities - implications for seismicity in NE Brazil; Gilberto Da Silva Leite Neto (UFRN), Joaquim Mendes Ferreira (UFRN), José Antonio De Morais Moreira (UFRN), Francisco Hilário Rego Bezerra (UFRN), Aderson Farias Do Nascimento (UFRN).*

## TECTONIC STRUCTURE TWO (TS-2) / Monday (15th-Apr./2019)

*Chairs: George Sand & Carlos Chaves*

- 10:45 *Updated Crustal Thickness map of central South America Based on Receiver Function measurements in the Pantanal and Chaco basins, western Brazil; Julia Carolina Rivadeneyra Vera (USP), Marcelo Belentani De Bianchi (USP).*

- 11:00 *Crustal Structure Of The Pantanal Basin From Joint Inversion Of Receiver Functions And Rayleigh-Wave Dispersion; Victoria Cedraz (UFRN), Jordi Julià (UFRN), Marcelo Assumpção (USP).*

- 11:15 *Moho Depth from S-wave Receiver Function in reverberating low-velocity sedimentary basin; Luciana Lopez (INPRES), Marcelo Bianchi (USP), Marcelo Assumpção (USP), Gerardo Sánchez (INPRES).*

- 11:30 *Estrutura Crustal da Bacia do Pantanal por Tomografia de Ruído Ambiental; Matheus Freire Souza Barcelos Guimarães (UNIPAMPA), Bruno De Barros Collaço (USP).*

- 11:45 *Tomography from Ambient Cross Correlation in Brazilian Southeast region: preliminary results; Fabio Dias (ON).*

Monday (15<sup>th</sup> April, 2019)

- 12:00 *Crustal structure using ambient seismic noise in west-central Brazil; Taghi Shirzad* (IAG/USP), Marcelo Assumpcao (IAG/USP), Marcelo Bianchi (IAG/USP), Bruno Collaço (IEE/USP).
- 12:15 *Azimuthal anisotropy in west-central Brazil using ambient seismic noise; Taghi Shirzad* (IAG/USP), Marcelo Assumpcao (IAG/USP), Marcelo Bianchi (IAG/USP), Bruno Collaço (IEE/USP).

## LIGHTNING TALKS SEISMICITY STUDIES (LTSS) / Monday (15th-Apr./2019)

*Chairs:* Carlos Chaves

- 13:45 *Earthquakes are NOT fun; Bruno Collaço* (CS/USP).
- 13:50 *The IPT And The Study Of Seismicity; Luis Carlos Ribotta* (IPT), Patricia Del Gaudio Orlando (IPT).
- 13:55 *The Seismic Zone of Southern Paraguay with a Revised Catalog: Another Example of Intraplate Activity in a Lithospheric Thin Spot?; Marcelo Assumpção* (USP), Moises Gadea (UNA/Paraguay), Maxi Caballero (UNA/Paraguay), Daniel Portner (UA/USA), Emily Rodríguez (UA/USA), Marcelo Rocha (UnB).

## SEISMICITY STUDIES ONE (SS-1) / Monday (15th-Apr./2019)

*Chair:* Marcelo Assumpção

- 14:15 *Recent and future ISC products: chances for international collaboration; Dmitry Storchak* (ISC/UK). (**Invited**).

*Chairs:* Lucas Barros & Jordi Julià

- 15:15 *Shallow Rupture in Very Large and tsunami earthquakes evidenced by their High Frequency Energy Release Rate and its use for rapid assessment of enhanced tsunami potential; Jaime Andres Convers* (USP), Andrew Newman (Georgia Tech/USA).
- 15:30 *Using a physics-based, coupled model to constrain the 2018 Sulawesi earthquake source and determine the cause of the subsequent tsunami; Elizabeth H. Madden* (UnB), Thomas Ulrich (LMU/Munich), Stefan Vater (FU/Berlin), Joern Behrens (Universität Hamburg), Ylona Van Dinther (Utrecht University/NL), Iris Van Zelst (ETH/Zürich), Alice-Agnes Gabriel (LMU/Munich).
- 15:45 *Rupture Lengths of Brazilian Earthquakes from Relative Location of Aftershocks: Evidence for Depth Dependence of Stress Drops; Marcelo Assumpção* (USP), Caio Ciardelli (USP).

- 16:00 *Investigating Deep-Focus Earthquakes Along the Perú-Brazil Border (Acre) Region; Jordi Julià (UFRN), Francisco M. Barbosa (UFAC), Isaac D.b. Da Silva (UFAC), Germán Prieto (UNAL).*

## SEISMICITY STUDIES TWO (SS-2) / Monday (15th-Apr./2019)

*Chairs: Jordi Julià & Lucas Barros*

- 16:30 *Characterization of soil layers and sediments in sedimentary basins by the H / V spectral ratio method of natural noise in seismographic stations; Eduardo Sales Pitta Filho (USP), Irfan Ullah (BKUC/Pakistan).*
- 16:45 *The Phases Of Civil Defence Applied To Living With The Seismic Shocks In The State Of Ceará; Francisco Das Chagas Brandão Melo (CONDEC/Defesa Civil/Ceará), Lucas Vieira Barros (UnB).*
- 17:00 *The blog Sismos do Nordeste: an experience in the dissemination of seismic events; Joaquim Ferreira (UFRN), Eduardo Menezes (UFRN), Aderson Do Nascimento (UFRN), Heleno Lima Neto (UNP), Marconi Oliveira (UFRN), André Silva (UFRN), Rômulo Brito (UFRN).*

## POSTER SESSION ONE (PP-1) / Monday to Tuesday

*Posters should be setup on Sunday evening and removed by Tuesday after the morning coffee-break. Presentation is on Mon. 15<sup>th</sup> April, 2019 at 17:15.*

- PP-1-01 *Evaluating the Effects of Finite-Frequency Theory on the Determination of the Mantle Transition Zone Thickness; Carlos A. M. Chaves (USP), Lauren Waszek (NMSU/USA), Jeroen Ritsema (University of Michigan/USA), Nicholas Schmerr (University of Maryland/USA).*
- PP-1-02 *Finite-frequency tomography using relative P-wave travel time residuals to constrain the velocity structure of the upper mantle underneath SE Brazil; Erico Imbernon Machado (USP), Carlos Alberto Moreno Chaves (USP), Fabio Luiz Dias (ON), Sérgio Luiz Fontes (ON).*
- PP-1-03 *Development of computational routines to compute a library of Fréchet kernels for finite frequency tomography in SE Brazil; Lais Nathalia Rodrigues (USP), Carlos Alberto Moreno Chaves (USP), Fabio Luiz Dias (ON), Sergio Luiz Fontes (ON).*
- PP-1-04 *Development of computational routines for travel time data processing for finite-frequency tomography in Brazil; Felipe Proença Corral (USP), Carlos Alberto Moreno Chaves (USP), Fabio Luiz Dias (ON), Sérgio Luiz Fontes (ON).*
- PP-1-05 *Underworld2 Code: Numerical Subduction Model; E. R. Rondán (GeoOndas), W. A. Arellano (GeoOndas).*

- PP-1-06 *Seismic Anisotropy in Mid-Plate South America: an Updated Model Using Shear Wave Splitting Measurements and Waveform Tomography*; Bruna Chagas De Melo (DIAS), **Marcelo Assumpcao** (USP), Nicolas Celli (DIAS), Sergei Lebedev (DIAS).
- PP-1-07 *SKS-splitting analysis for detecting seismic anisotropy beneath the St. Peter and St. Paul Archipelago: first results*; Guilherme Weber Sampaio De Melo (UFRN), Gaëlle Lamarque (IFREMER), **Aderson Farias Do Nascimento** (UFRN).
- PP-1-08 *Upper crustal velocity structure beneath Northern Peruvian Andes from ambient noise tomography*; **Cristobal Condori** (UnB), George S. França (UnB), Hernando J. Tavera (IGP), Colton Lynner (UA), Susan Beck (UA).
- PP-1-09 *Study of physical and structural properties in the region of the Pantanal, Paraná and Chaco-Paraná Basins using joint inversion of gravimetric observations and surface waves velocity*; **Denise Silva De Moura** (IAG/USP), Yára Regina Marangoni (IAG/USP), Carlos Alberto Moreno Chaves (IAG/USP).
- PP-1-10 *Illustrating the power of Bayesian inversion of receiver functions and surface wave dispersion curves within lithosphere and asthenosphere of iconic Alaska provinces*; **Isabella Gama** (Brown University/USA), Karen M. Fischer (Brown University/USA), Zachary Eilon (UCSB/USA), Hannah E. Krueger (Brown University/USA), Colleen A. Dalton (Brown University/USA).
- PP-1-11 *S -Wave Velocity Model (1D) For The Lithosphere Of The Pantanal Basin*; **Estevão Vasconcello Campos Tadeu** (USP), Marcelo Assumpção (USP).
- PP-1-12 *P-wave tomography sensibility test applied to the Chaco-Paraná, Paraná and Pantanal basins inversion*; **Israel Dragone** (USP), Marcelo Bianchi (USP).
- PP-1-13 *Shear wave velocity models for the Chaco-Paraná Basin from ambient seismic noise analysis: constraints on upper crustal structure*; **Melina Lunansky** (FCAG-UNLP), Rosa María Laura (FCAG-UNLP), Buffoni Carolina (FCAG-UNLP).
- PP-1-14 *Study of Chaco basin thickness with receiver function*; **Pedro L. A. Moraes** (USP).
- PP-1-15 *Joint inversion of high-frequency receiver functions and high-frequency phase and group dispersion curves for sedimentary structure: Case study in the Parnaíba Basin of NE Brazil*; **T. Victor** (UFRN), J. Julià (UFRN), N.j. White (University of Cambridge), V. Rodríguez-Tribaldos (University of Cambridge).
- PP-1-16 *Crustal thickness and Vp/Vs ratio for three stations in Uruguay using receiver function analysis: preliminary results*; **Martín Rodríguez** (UDELAR), Anahi

Curbelo (*UDELAR*), Hernán Castro (*UDELAR*), Damian Dell'acqua (*UDELAR*), Enrique Latorres (*UDELAR*), Leda Sánchez Bettucci (*UDELAR*), Marcelo Assumpção (*USP*).

- PP-1-17 *Evaluation Of Herglotz-Wiechert Inversion Using P Wave Travel Times From Brazilian Seismic Network Stations; Thabita S.g. Barbosa (UFRN), Jordi Julià (UFRN)*.
- PP-1-18 *The Pseudo Active Fault System Of 'Marinho Da Serra', Quadrilatero Ferrífero/mg, Brazil; Antônio Augusto Seabra Gomes Jr (SGGM Geologia & Mineração), Dr.issamu Endo (UFOP)*.
- PP-1-19 *Natural Land And Geotechnical Structures Deformations Detected By Radarsat In The Platô Moeda Region, Itabirito-Quadrilátero Ferrífero; Antônio Augusto Seabra Gomes Jr. (SGGM Geologia & Mineração), Raúl Silva Gomez (TELESPAZIO)*.
- PP-1-20 *Determination of the Probability Increase in Time (Alarm Times, TIP) for the occurrence of large earthquakes in South America (application of Algorithm M8); Leandro Rodriguez (CERESIS)*.
- PP-1-21 *Teleseisms recorded by the Aquidauana station (AQDB) in 2015; Danilo Cesar Silva Corrêa (UFMS), Edina Maria Facincani (UFMS), Gustavo Marques E Amorim (UFMS), Estevão Vasconcello Campos Tadeu (USP), Marcelo Sousa Assumpção (USP), Tiago Gomes Da Silva (UFMS)*.
- PP-1-22 *Implementation Of An Automatic Filtering Method For The Signals Of The Seismographic Station (Aquaduana - Aqdb, Ms) In A Real-Time Seismic Monitoring Software; Danilo Cesar Silva Corrêa (UFMS), Edna Maria Facincani (UFMS), Marcelo Sousa Assumpção (USP), Tiago Gomes Da Silva (UFMS), Gustavo Marques E Amorim (UFMS), Gustavo F. Dourado (UFMS)*.
- PP-1-23 *Quality Control Of Events Recorded By The Seismographic Station Of Chapadão Do Sul (C2Sb), Ms, Through The Seismogram Viewer Software (Seisgram2K); Carlos Allan Oliveira Dos Santos (UFMS), Edna Maria Facincani (UFMS), Marcelo Sousa Assumpção (USP), Gustavo Facincani Dourado (UFMS), Wanly Pereira (UFMS)*.
- PP-1-24 *The Navier-Stokes Equation and the Vibration Problem on Soil Mechanics; Karl Igor Martins Guerra (PUC/RJ), Celso Romanel (PUC/RJ)*.
- PP-1-25 *Tsunami gravity modes described by vector spherical harmonics; Luiz Gabriel S. De Oliveira (UFES), Natália V. De Oliveira (UFES), Carlos André M. Silva (UFES)*.

Tuesday (16<sup>th</sup> April, 2019)

## SEISMICITY STUDIES / SIGNAL PROCESSING (SS-3/SIGNAL) / Tuesday (16th-Apr./2019)

*Chair: Aderson Nascimento*

- 08:15 *Seismic noise-based imaging and monitoring with the phase coherence approach; Martin Schimmel (ICTJA/CSIC/Spain). (Invited).*

*Chairs: Lucas Barros & Aderson Nascimento*

- 09:15 *Improving ambient noise correlograms using an adequate processing flow; David Wendel Tomaz Da Silva (UFRN), Aderson Farias Do Nascimento (UFRN), Flavio Lemos De Santana (UFRN).*
- 09:30 *Extracting optimum inter-station empirical Green's function in west-central Brazil; Taghi Shirzad (IAG/USP), Marcelo Assumpcao (IAG/USP).*
- 09:45 *Signal Denoising and Microseismic Event Location Improvement Using Adaptive Filtering in hydrofracking operations; Flávio Lemos De Santana (UFRN), Aderson Farias Do Nascimento (UFRN), Waldson Patrício Do Nascimento Leandro (UFRN), Bruno Motta De Carvalho (UFRN).*
- 10:00 *Seismic and Infrasound Signal Analysis in the Discrimination of Natural and Artificial Events; Brandow Lee Neri (Unb), Lucas Vieira Barros (Unb), Juraci Mario De Carvalho (Unb), Darlan Portela Fontenele (Unb).*

## SEISMICITY STUDIES FOUR (SS-4) / Tuesday (16th-Apr./2019)

*Chairs: Aderson Nascimento & Juraci Carvalho*

- 10:45 *Capivara Reservoir, SP, 42 Years Of Induced Seismicity; Luis Carlos Ribotta (IPT), Marcelo Assumpção (IAG/USP), Pedro N. Pedreira (CTG Brasil S.A.), Fabiano Venciquera (CTG Brasil S.A.).*
- 11:00 *Characteristics of the ongoing seasonally rain-induced seismicity in Jurupema, SP; Jaime Andres Convers (USP), Marcelo Assumpção (USP), Jose Roberto Barbosa (USP).*
- 11:15 *Recent seismicity in Cascavel-CE (2017); José Augusto Silva Da Fonsêca (UFRN), Joaquim Mendes Ferreira (UFRN), Aderson Farias Do Nascimento (UFRN), Eduardo Alexandre De Menezes (UFRN), Hélio Carlos De Lima Neto (UnP).*
- 11:30 *An improved velocity model for routine hypocenter location in Central Brazil; Juraci Carvalho (ObSIS/UnB), Edi Kissling (ETH/Zürich), Lucas Barros (ObSIS/UnB), Marcelo Assumpção (CS/USP), Marcelo Rocha (ObSIS/UnB).*

Tuesday (16<sup>th</sup> April, 2019)

- 11:45 *Earthquake relocation, focal mechanisms and stress field in central Brazil; Juraci M. Carvalho (ObSIS/UnB), Lucas V. Barros (ObSIS/UnB), Jiří Zahradník (Charles University/Czech Republic), Mônica G. Von Huelsen (ObSIS/UnB), Vinicius Martins Ferreira (ObSIS/UnB).*
- 12:00 *A New seismic zone in Porto dos Gaúchos - MT; Lucas V. Barros (UnB), Marcelo Assumpção (USP), Juraci Carvalho (UnB).*
- 12:15 *Maranhão aftershocks activity studies with local seismic network for getting the main shock as a GT5 event; Lucas Vieira Barros (UnB), Marcelo Assumpção (USP), Marcelo Rocha (UnB), George Sand (UnB), Juraci Carvalho (UnB).*

## LIGHTNING TALKS FIELD ADVANCES (LTFA) / Tuesday (16th-Apr./2019)

*Chairs: Carlos Chaves*

- 13:45 *Rede Sismográfica de Carajás - PA (RSCK); Bruno Collaço (CS/USP), Marlon Pirchiner (CS/USP), Julia Prado (CS/USP), Camille Aguiar (CS/USP), Marcelo Assumpção (CS/USP), Dionísio Uendro (CTF, Vale), Wanderson Pereira (CTF, Vale).*
- 13:50 *Nova Estação Sismográfica SBB no Brasil; Luis Galhardo (USP), Marcelo S. Assumpção (USP), Marcelo B. De Bianchi (USP), Jackson Calhau (USP).*
- 13:55 *Pursuing data completeness in RSBR data archives; Marcelo Bianchi (USP), Fabio Dias (ON), Thiago Moeda (ON), Giovanna Anacleto (ON).*

## SEISMICITY STUDIES FIVE (SS-5) / Tuesday (16th-Apr./2019)

*Chairs: Lucas Barros & Joaquim Ferreira*

- 14:15 *Seismic Monitoring of the Pantanal Sedimentary Basin and Adjacencies; Edna Maria Facincani (UFMS), Marcelo Sousa Assumpção (USP), Danilo Cesar Silva Corrêa (UFMS), Diógenes Ferreira Resende Gomes (UFMS), Daniel Pontin Rodrigues (UFMS), Gabrieli Ribeiro Ferri (UFMS), Carlos Allan Oliveira Dos Santos (UFMS), Alexia Murgi Leonardo (UFMS), Bruno De Barros Collaço (USP), Jackson Calhau Souza (USP), Gustavo F. Dourado (UFMS).*
- 14:30 *Distant earthquakes felt in Brazil.; George Sand França (UnB), Cádia Lorrany S. Sampaio (UnB), Rita C. A. Campos (UnB), Eveline A. Sayão (UnB), Susanne T. Maciel (UnB), Elizabeth H. Madden (UnB), Chris B. Fianco (UnB).*
- 14:45 *Modified Mercalli Intensity Values due to different interpreters: an automatic approach; Mariana Lion (USP), Marcelo Bianchi (USP).*

Tuesday (16<sup>th</sup> April, 2019)

- 15:00 *Attenuation of MM intensities for intraplate earthquakes in Brazil: Application to evaluate historical seismicity; Lúcio Quadros (IAG/USP), Marcelo Assumpção (IAG/USP), Ana Paula Trindade De Souza (IAG/USP).*

## **SEISMICITY STUDIES SIX / PROBABILISTIC SEISMIC HAZARD ANALYSIS (SS-6/PSHA) / Tuesday (16th-Apr./2019)**

*Chair: Marcelo Assumpção*

- 15:15 *Probabilistic Seismic Hazard Assessment For Argentina; Gerardo Sánchez Girino (INPRES/UNSI/Argentina). (Invited).*

*Chairs: Marcelo Assumpção & Joaquim Ferreira*

- 16:30 *Seismic Hazard Evaluation for a Site near Cubatão, Serra do Mar, SE Brazil: Comparison with the Preliminary PSHA Map for Brazil; João Carlos Dourado (UNESP), Marcelo Assumpção (USP), Matheus Nery (CMOC international Brasil).*

- 16:45 *Comparison in attenuation among ground motion prediction equations focus on Brazilian stable continental region; Jackeline R C Huertas (PUC/RJ), Anthony Ninanya (PUC/Peru), Celso Romanel (PUC/RJ).*

- 17:00 *Seismic evaluation of structural systems: a probabilistic approach; Eduardo Marques Vieira Pereira (UNICAMP), Isabela Durci Rodrigues (UNICAMP), Gustavo Henrique Ferreira Cavalcante (UNICAMP), Luiz Carlos Marcos Vieira Junior (UNICAMP), Gustavo Henrique Siqueira (UNICAMP).*

- 17:15 *Effects on the structure of the Tucuruí Dam axis due to the machinery stoppage on the blackout of March 21, 2018 in North and Northeast regions; Lucas V. Barros (Unb), Gilson Machado Da Luz (ELETRONORTE SA/Brazil), Juraci Carvalho (Unb), Darlan P Fontenele (UnB).*

- 17:30 *Brumadinho tailings dam failure through the USP Seismological Center perspective; Bruno Collaço (CS/USP), Marcelo Assumpção (CS/USP).*

## **POSTER SESSION TWO (PP-2) / Tuesday - Wednesday**

*Posters should be setup on Tuesday by Lunch time and removed by Wednesday after the morning coffee-break. Presentation is on Tue. 16<sup>th</sup> April, 2019 at 17:45 and Wed. 17<sup>th</sup> April, 2019 at 09:15.*

- PP-2-01 *Hydraulic fracturing noise observations and characterization in a oil field; David Wendell Tomaz Da Silva (UFRN), Aderson Farias Do Nascimento (UFRN).*

- PP-2-02 *Güralp Systems; Aquarius, the future of ocean seismic research;* **Stuart Allardice** (Güralp Systems Ltd), Phil Hill (Güralp Systems Ltd).
- PP-2-03 *Why should the community move towards digital sensors?;* **Stuart Allardice** (Güralp Systems Ltd), Phil Hill (Güralp Systems Ltd).
- PP-2-04 *Numerical Simulation of an Optical Seismometer Based in Fiber Bragg Grating (FBG);* **W. A. Arellano** (GeoOndas), E. R. Rondán (GeoOndas).
- PP-2-05 *Evaluation of Capivara (SP) station orientation using teleseismic events;* **Victor Salles** (USP), Marcelo B. De Bianchi (USP), Jesus Berrocal (TerraFísica).
- PP-2-06 *Quality control system in seismology;* **Emilia Brasilio** (USP), Marcelo Bianchi (USP), Jackson Calhau (USP), Bruno Colaço (USP), Marcelo Assumpção (USP).
- PP-2-07 *RSIS - REDE SISMOGRÁFICA DO SUL E SUDESTE DO BRASIL: Situação Atual e Projeções Futuras;* Thiago Moeda (ON), Ronaldo Carvalho (ON), Giovanna Anacleto (ON), Italo Mauricio (ON), Sergio L. Fontes (ON), **Fabio Dias** (ON).
- PP-2-08 *IoT in seismology: real-time transmission methods;* **Jackson Calhau** (IAG/USP), Bruno Collaço (IEE/USP), Marlon Pirchiner (IAG/USP), Luis Galhardo (IAG/USP), Felipe Neves (IAG/USP), José Roberto Barbosa (IAG/USP), Cleusa Barbosa (IAG/USP), Emilia Brasilio (IAG/USP), Marcelo Bianchi (IAG/USP), Marcelo Assumpção (IAG/USP).
- PP-2-09 *Macroseismic Intensity Data Online Publisher (MIDOP): Implementation for Brazilian earthquakes;* **Lúcio Quadros** (IAG/USP), Marcelo Assumpção (IAG/USP).
- PP-2-10 *Seismic risk and seismic vulnerability: why it's important to know the difference;* **Enrico Mangoni** (Studio Mangoni/Brazil).
- PP-2-11 *A comparison of NBR15421:2006 seismic analysis methods on a three story shear building;* Lucas Depollo Ferreira (UFES), Walnório Graça Ferreira (UFES), Rodrigo Silveira Camargo (UFES), **Laís De Bortoli Lecchi** (UFES).
- PP-2-12 *O impacto do novo mapa de sismicidade brasileira na avaliação de vulnerabilidade das estruturas de concreto;* **Paulo S. T. Miranda** (FEUP/Portugal), Humberto S. A. Varum (FEUP/Portugal), Nelson S. Vila Pouca (FEUP/Portugal).
- PP-2-13 *Probabilistic Seismic Hazard Map for Bolivia;* **Gonzalo Fernandez M.** (OSC), Nieto C. Mayra (OSC), Griffiths J. Teddy (OSC), Assumpcao Marcelo (USP).
- PP-2-14 *Historical And Cartographic Survey In The Analysis Of Seismic Activity In West-Central Brazil: Emphasis In The Pantanal Sedimentary Basin;* Lucimara José

Da Silva (*UFMS*), Marcelo Sousa Assumpção (*USP*), **Edna Maria Facincani** (*UFMS*).

PP-2-15 *Focal mechanisms of Brazilian earthquakes from waveform and envelope inversion*; **Mariana Lopes** (*UFF*), Fabio Dias (*ON*).

PP-2-16 *Polarization analysis of microseism sources in Saint Peter and Saint Paul Archipelago, Equatorial Atlantic*; Daniel Évora De Queiroz (*UFRN*), **Aderson Farias Do Nascimento** (*UFRN*).

PP-2-17 *Focal Mechanism in Mid-Ocean Ridges and Transform Faults*; **Afonso Rodrigues De Almeida** (*UFC*).

PP-2-18 *Focal Mecanism Database for South America*; **Fabio Dias** (*ON*), Marcelo Assumpção (*USP*).

PP-2-19 *Sismicidade do Estado do Ceará*; **Luana Albuquerque Do Nascimento** (*UFC*), Afonso Rodrigues Almeida (*UFC*), Francisco Das Chagas Brandão Melo (*UFC*), Brandow Lee Neri (*UnB*), Lucas Vieira Barros (*UnB*).

PP-2-20 *Seismic activity in Irauçuba, NE Brazil, from September 2015 until March 2016*; **Eduardo Alexandre Santos De Menezes** (*UFRN*), Aderson Farias Do Nascimento (*UFRN*), Heleno Calos Lima Neto (*Escola de Engenharias e TI, UnP*), Maria Osvalneide Lucena Sousa (*UFRN*), Joaquim Mendes Ferreira (*UFRN*), Francisco Hilário Rego Bezerra (*UFRN*).

PP-2-21 *Estudo da sismicidade na região de Sergipe-Alagoas (2015-2018)*; **George Sand França** (*UnB*), Bruno Luís Monteiro Bezerra (*UnB*), Genesson Delmondes Castro (*UnB*), Carlos Da Silva Vilar (*UFRN*), Chris B. Fianco (*UnB*).

PP-2-22 *Identification of Earthquakes in the city of Londrina/Paraná through cross correlation*; **Leonardo Fabricius Silva** (*USP*), Marcelo Belentani De Bianchi (*USP*).

PP-2-23 *Seismological Correlations in Laúca Dam*; **Joanne Magalhães Borges** (*UnB*), Francisco P. Neto (*PRODEL-EP*), Rejane Cicerelli (*UnB*), George Sand França (*UnB*).

PP-2-24 *Geiger's modified method: Inversion for hypocentral location and seismic velocity*; Miro Feliciano Döring Dos Santos (*UFRN*), **Jordi Julià** (*UFRN*).

PP-2-25 *A comparison of the Brazilian regional magnitude, mR, with the teleseismic mb for intraplate sub-Andean earthquakes*; **José Roberto Barbosa** (*IAG/USP*), Cleusa Barbosa (*IAG/USP*), Marcelo Assumpção (*IAG/USP*), Marcelo Bianchi (*IAG/USP*), Bruno Collaço (*IEE/USP*).

## **FIELD ADVANCES ONE (FA-1) / Wednesday (17th-Apr./2019)**

*Chairs: Marcelo Assumpção & Juraci Carvalho*

- 08:15 *Improvements On Routine Seismic Data Processing; Gerardo Sánchez Girino (UNSJ), Valeria Nicolia (INPRES), Marcelo Moreno (UNSJ).*
- 08:30 *Seismology at the Federal University of Ceará; Afonso Almeida (UFC), Lucas Vieira Barros (UNB), Brandow Lee Neri (UNB), Francisco Das Chagas Brandão (CONDEC/Defesa Civil/Ceará), Darlan Portela Fontenele (UNB).*
- 08:45 *Ocean Bottom Seismometers: A short overview focusing on data processing; Fabio Dias (ON), Sergio Fontes (ON), Thiago Moeda (ON).*
- 09:00 *USP Data Center: infrastructure supporting the Seismology Center; Jackson Calhau (IAG/USP), Bruno Collaço (IEE/USP), Marcelo Bianchi (IAG/USP), Marlon Pirchiner (IAG/USP), Marcelo Assumpção (IAG/USP).*





