

CONVENERS:

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S01.04 - Advanced and non-conventional seismic methods for monitoring active volcanoes

Time	ID	Title	Author Name	Affiliations	Presenter Name
14.30 - 14.45	206	Noise-based seismic monitoring of the Campi Flegrei caldera	Lucia Zaccarelli (1) Francesca Bianco (2)	(1) INGV, sez. Bologna (2) INGV, Osservatorio Vesuviano	Lucia Zaccarelli
14.45 - 15.00	281	Methods of automatic recognition of seismo-volcanic events: State-of-the-art and perspectives	Philippe Lesage (1) Guillermo Cortés (2) Roberto Carniel (2) M. Carmen Benítez (3) Manuel Titos Luzón (3) Ángel Bueno Rodríguez (3) Luz García Martínez (3) Raúl Arámbula Mendoza (4)	(1) Université Grenoble Alpes, Université Savoie Mont Blanc, CNRS, IRD, IFSTTAR, ISTerre, 38000 Grenoble, France. (2) Dipartimento Politecnico di Ingegneria e Architettura, Università degli Studi di Udine, Udine, Italy. (3) Departamento de Teoría de la Señal, Telemática y Comunicaciones, E. T. S. de Ingenierías Informática y de Telecomunicación. Universidad de Granada, Granada, Spain. (4) Centro Universitario de Estudios e Investigaciones en Vulcanología, Universidad de Colima, Mexico.	Philippe Lesage (Invited)
15.00 - 15.15	318	Integrating passive seismicity with Web-Based GIS for a new perspective on volcano imaging and monitoring: the case study of Mt. Etna	Roberto Guardo (1) Luca De Siena (2)	(1) CONICET - UNRN (2) University of Aberdeen	Roberto Guardo
15.15 - 15.30	358	Detecting hidden seismo-volcanic events through the seismic network covariance matrix analysis	Jean Soubestre (1) José Barrancos (1,2) Luca D'Auria (1,2) German D. Padilla (1,2) Nikolai M. Shapiro (3,4) Léonard Seydoux (5) Nemesio M. Perez (1,2)	(1) Instituto Volcanológico de Canarias (INVOLCAN), Puerto de la Cruz, Tenerife, Spain (2) Instituto Tecnológico y de Energías Renovables (ITER), Granadilla de Abona, Tenerife, Spain (3) Institut de Physique du Globe de Paris (IPGP), UMR CNRS 7154, Paris, France (4) Schmidt Institute of Physics of the Earth, Russian Academy of Sciences, Moscow, Russia (5) Université Grenoble Alpes, Institut des Sciences de la Terre (ISTerre), Grenoble, France	Jean Soubestre
15.30 - 15.45	445	Seismo-acoustic wavefield of Strombolian explosions at Yasur volcano, Vanuatu using a broadband seismo-acoustic network and infrasonic sensors on a tethered aerostat	Robin Matoza (1) Arthur Jolly (2) Bernard Chouet (3) Phillip Dawson (4) David Fee (5) Alex Iezzi (5) Ben Kennedy (6) Rebecca Fitzgerald (6) Richard Johnson (2) Geoff Kilgour (2) Bruce Christenson (2) Eslina Garaebiti (7) Nick Key (6)	(1) University of California, Santa Barbara, USA (2) GNS Science, New Zealand (3) Chemin des Lys 13, 1273 Arzier-Le Muids, Switzerland (4) U.S. Geological Survey, Menlo Park, CA, USA (5) University of Alaska, Fairbanks, USA (6) University of Canterbury, New Zealand (7) Vanuatu Meteorology and Geohazards Department, Vanuatu	Robin Matoza
15.45 - 16.00	512	6C ground motion observations on volcanoes: opportunities, experiments, observations	J. Wassermann (1) H. Igel (1) F. Guattari (2) C.J. Bean (3) K.L. Li (3) M. Möllhoff (3) A. Bell (4) M. Ruiz (5) J. McCloskey (4)	(1) Ludwig-Maximilians-University (2) iXblue (3) Dublin Institute for Advanced Studies (4) University of Edinburgh (5) IGEPN Ecuador	C.J. Bean
16.00 - 16.15	526	Features of Seismic Events Within the Lazufre Volcanic System, Northern Chile/Argentina	Heather McFarlin Stephen R. McNutt Glenn Thompson Jochen Braunmiller	University of South Florida, USA	Heather McFarlin
16.15 - 16.30	561	The vibrant future of seismology by using fibre optic cables	Philippe Jousset (1), Thomas Reinsch (1), Trond Ryberg (1), Hanna Blanck (2), Andy Clarke (3), Rufat Aghayev (3), Gylfi Páll Hersir (2), Michael Weber (1,4), Charlotte Krawczyk (1,5)	(1) GFZ Potsdam, Potsdam, Germany (pjousset@gfz-potsdam.de), (2) ÍSOR Iceland Geosurvey, Reykjavik, Iceland, (3) Silixa Ltd, Elstree, Borehamwood, UK, (4) Univ. of Potsdam, Institute of Earth and Environmental Science, Potsdam, Germany, (5) Technical Univ. of Berlin, Germany	Philippe Jousset
17.00 - 17.15	717	Towards using tides to detect when volcanoes are ready to erupt	Társilo Girona (1) Christian Huber (2) Corentin Caudron (3)	(1) Jet Propulsion Laboratory, California Institute of Technology (2) Department of Earth, Environmental and Planetary Sciences, Brown University (3) Department of Geology, Ghent University	Társilo Girona
17.15 - 17.30	761	"LAKIY" - An automatic-supervised system for Near-Real Time processing of volcanic seismicity	Oscar Cadena Ibarra (1) Jhon Meneses Muñoz (1)	Servicio Geológico Colombiano	Oscar Cadena Ibarra
17.30 - 17.45	797	Seismic velocity changes at White Island volcano, New Zealand, using ten years of ambient noise interferometry	Alexander Yates (1) Martha Savage (1) Arthur Jolly (2) Corentin Caudron (3)	(1) Victoria University of Wellington, New Zealand (2) GNS Science, New Zealand (3) Ghent University, Belgium	Alexander Yates
17.45 - 18.00	865	Towards forecasting gas-driven eruptions using continuous seismic recordings	Corentin Caudron (1) Társilo Girona (2) Yosuke Aoki (3) Thomas Lecocq (4) Benoit Taisne (5,6) Raphael De Plaen (7) Toshiko Terakawa (8) Suparjan (9)	(1) Department of Geology, Ghent University, Belgium (2) Jet Propulsion Laboratory, California Institute of Technology, USA (3) Earthquake Research Institute, Japan (4) Royal Observatory of Belgium, Belgium (5) Earth Observatory of Singapore, Singapore (6) Asian School of Environment, Nanyang Technological University, Singapore (7) Centro de Sismología y Vulcanología de Occidente, University de Guadalajara, Mexico (8) Nagoya University, Japan (9) Center for Volcanology and Geological Hazard Mitigation, Bandung, Indonesia	Corentin Caudron
18.00 - 18.15	872	Quantifying accelerating time-series of volcanic earthquakes: Bayesian point process models for clustered and anti-clustered seismicity.	Andrew Bell (1) Alyssa Crippen (1) Mark Naylor (1) Stephen Hernandez (2) Ian Main (1) Mario Ruiz (2)	(1) School of GeoSciences, University of Edinburgh, Edinburgh, U.K. (2) Instituto Geofísico, Escuela Politécnica Nacional, Quito, Ecuador	Andrew Bell
18.15 - 18.30	917	Single-station seismo-acoustic monitoring of Nyiragongo's lava lake activity (D.R. Congo)	Julien Barrière (1) Nicolas d'Oreye (1,2) Adrien Oth (1) Halldor Geirsson (3) Niche Mashagiro (4) Jeffrey B. Johnson (5) Benoît Smets (6) François Kervyn (6)	(1) European Center for Geodynamics and Seismology, Luxembourg (2) National Museum of Natural History, Luxembourg (3) University of Iceland, Iceland (4) Goma Volcano Observatory, Democratic Republic of the Congo (5) Boise State University, USA (6) Royal Museum for Central Africa, Belgium	Julien Barrière
18.30 - 18.45	962	Monitoring volcanoes using seismic anisotropy	Martha Savage (1) Jessica Johnson (2) Toshiko Terakawa (3) Michael Kendall (4) Takuto Maeda (5,6) Yosuke Aoki (5)	(1) Victoria University of Wellington, NZ (2) University of East Anglia, GB (3) Nagoya University, Japan (4) Univ. of Bristol, GB (5) ERI, Univ. of Tokyo, Japan (6) Hirosaki Univ., Japan	Martha Savage
18.45 - 19.00	1067	Automatic Relative reLocation of microseismicity at active volcanoes in Vatnajökull glacier, Iceland	Kristín S. Vogfjörð (1) Gunnar B. Gudmundsson (1) Ragnar Slunga (2)	(1) Icelandic Meteorological Office, Reykjavik, Iceland (2) QuakeLook AB, Stockholm, Sweden	Kristín S. Vogfjörð

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06 - 35.	359	Adaptive non-linear filtering for the detection of microearthquakes	Yusef Rajaeitabrizi (1,2,3) Robabeh Salehiozoumchelouei, (1,2,3) Luca D'Auria (1,2) José Luis Sánchez de la Rosa (3)	(1) Instituto Volcanológico de Canarias (INVOLCAN), Puerto de la Cruz, Spain (2) Instituto Tecnológico y de Energías Renovables (ITER), Granadilla de Abona, Spain (3) Universidad de La Laguna, Tenerife, Spain	Yusef Rajaeitabrizi
06 - 36.	360	High resolution imaging of the b-value at Long Valley caldera	Rubén García-Hernández (1) Luca D'Auria (1,2) José Barrancos (1,2) German D. Padilla (1,2)	(1) Instituto Volcanológico de Canarias (INVOLCAN), Puerto de la Cruz, Spain (2) Instituto Tecnológico y de Energías Renovables (ITER), Granadilla de Abona, Spain	Rubén García-Hernández
06 - 37.	361	Multiscale analysis of geophysical signals using financial markets tools	Robabeh Salehiozoumchelouei (1,2,3) Yusef Rajaeitabrizi (1,2,3) José Luis Sánchez de la Rosa (3) Luca D'Auria (1,2)	(1) Instituto Volcanológico de Canarias (INVOLCAN), Puerto de la Cruz, Spain (2) Instituto Tecnológico y de Energías Renovables (ITER), Granadilla de Abona, Spain (3) Universidad de La Laguna, Tenerife, Spain	Robabeh Salehiozoumchelouei
06 - 38.	377	Volcano-Seismic Recognition (VSR) under noisy conditions via waveform reconstruction	Guillermo Cortés (1) Roberto Carniel (1) María A. Mendoza (2) Philippe Lesage (3) Javier Almendros (4) Carmen Benítez (5)	(1) Dipartimento Politecnico di Ingegneria e Architettura, Università degli Studi di Udine, Udine, Italy. (2) Universidad de Granada, Granada, Spain. (3) Université Grenoble Alpes, Université Savoie Mont Blanc, CNRS, IRD, IFSTTAR, ISTERre, 38000 Grenoble, France. (4) Instituto Andaluz de Geofísica y Prevención de Desastres Sísmicos, Universidad de Granada, Granada, Spain. (5) Departamento de Teoría de la Señal, Telemática y Comunicaciones, E. T. S. de Ingenierías Informática y de Telecomunicación. Universidad de Granada, Granada, Spain.	Guillermo Cortés
06 - 39.	483	Volcanic tremor source location based on seismic cross-correlations: application to synthetic tremor using volcano-tectonic earthquakes	Theodorus Permana (1) Takeshi Nishimura (1) Hisashi Nakahara (1) Eisuke Fujita (2) Hideki Ueda (2)	(1) Tohoku University, Japan (2) NIED, Japan	Theodorus Permana
06 - 40.	599	Automatic discrimination and fast wavefield decomposition of Volcano-Tectonic (VT) earthquakes by Independent Component Analysis: the case study of Campi Flegrei (Italy)	Simona Petrosino (1) Enza De Lauro (2) Mariarosaria Falanga (3)	(1) Istituto Nazionale di Geofisica e Vulcanologia, Sezione di Napoli - Osservatorio Vesuviano, Naples (Italy) (2) Università degli Studi Roma Tre, Dipartimento di Architettura, Rome (Italy) (3) Università degli Studi di Salerno, Dipartimento di Ingegneria dell'Informazione ed Elettrica e Matematica applicata/DIEM, Fisciano (Italy)	Simona Petrosino
06 - 41.	661	Seismic anisotropy time variations at Mt. Etna	Lucia Nardone (1) Francesca Bianco (1) Lucia Zaccarelli (2) Domenico Patanè (3)	(1) INGV - Sez. Napoli Osservatorio Vesuviano (2) INGV - Sez. Bologna (3) INGV - Sez. Catania Osservatorio Etno	Francesca Bianco
06 - 42.	800	Locations of families of repeating events at Telica Volcano, Nicaragua	Mel Rodgers (1) Mitch Hastings (1) Glenn Thompson (1) Diana Roman (2)	(1) University of South Florida (2) Carnegie Institution of Washington	Mel Rodgers
06 - 43.	803	Real-time analysis for rapid assessment of driving forces associated with seismic swarms	Chiou Ting Tan (1) Benoit Taisne (1,2)	(1) Earth Observatory of Singapore, Nanyang Technological University (2) Asian School of the Environment, Nanyang Technological University	Chiou Ting Tan
06 - 44.	849	Innovative developments in the identification and forecasting of volcanic and volcano-tectonic activity: Experiences from different volcanoes	Ramon Ortiz (1) José M. Marrero (2) Servando De la Cruz-Reyna (3) Alicia García (4) Angeles Linares (1)	(1) Volcanes de Canarias La Laguna Tenerife Spain (2) Instituto de Geofísica, Universidad Nacional Autónoma de México, (3) Asesoría Investigación y Desarrollo en Riesgos y Peligros Naturales y Antrópicos REPENSAR, Quito, Ecuador (4) Instituto de Geociencias, IGEO, CSIC-UCM Spain	Ramon Ortiz
06 - 45.	920	The broadband seismic network KivuSNet in the Virunga Volcanic Province (D.R. Congo): seismicity catalogues and new fundamental seismological models	Adrien Oth (1) Julien Barri�re (1) Nicolas d'Oreye (1,2) Georges Mavonga (3) Fran�ois Kervyn (4)	(1) European Center for Geodynamics and Seismology, Luxembourg (2) National Museum of Natural History, Luxembourg (3) Goma Volcano Observatory, Democratic Republic of the Congo (4) Royal Museum for Central Africa, Belgium	Adrien Oth
06 - 46.	986	Major explosions and eruptive style in 2017-2018 at Stromboli volcano	Salvatore Alparone (2) Francesca Bianco (1) Alessandro Bonaccorso (2) Sonia Calvari (2) Teresa Caputo (1) Mario Castellano (1) Luca D'Auria (3) Walter De Cesare (1) Bellina Di Lieto (1) Antonietta M. Esposito (1) Salvatore Gambino (2) Flora Giudicepietro (1) Domenico Lo Bascio (1) Giovanni Macedonio (1) Marcello Martini (1) Mario Mattia (2) Massimo Orazi (1) Rosario Peluso (1) Eugenio Privitera (2) Patrizia Ricciolino (1) Pierdomenico Romano (1) Giovanni Scarpato (1) Salvatore Spampinato (2) Anna Tramelli (1) Luciano Zuccarello (2)	(1) Istituto Nazionale di Geofisica e Vulcanologia, Osservatorio Vesuviano, Napoli, Italy (2) Istituto Nazionale di Geofisica e Vulcanologia, Osservatorio Etno, Catania, Italy (3) Instituto Volcanol�gico de Canarias, Puerto de la Cruz, Spain	Flora Giudicepietro
06 - 47.	1002	The seismic monitoring network and the seismicity of Ischia island	Anna Tramelli (1) Luca D'Auria (2) Antonietta M. Esposito (1) Danilo Galluzzo (1) Flora Giudicepietro (1) Domenico Lo Bascio (1) Marcello Martini (1) Lucia Nardone (1) Massimo Orazi (1) Rosario Peluso (1) Patrizia Ricciolino (1) Giovanni Scarpato (1)	(1) Istituto Nazionale di Geofisica e Vulcanologia, Osservatorio Vesuviano, Via Diocleziano, 328 - 80124 Napoli (Italy) (2) Instituto Volcanol�gico de Canarias (INVOLCAN), Tenerife, Spain	Anna Tramelli