

CONVENERS:

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S01.20 - Investigating eruption triggers and dynamic processes in magmas

Time	ID	Title	Author Name	Affiliations	Presenter Name
8.30 - 8.45	239	Experimental Vesiculation and Outgassing of Crystal-Bearing Dacite	Alan Whittington (1) Thomas Herbst (1) Mattia Pistone (2) Jim Schiffbauer (1) Tara Selly (1)	(1) University of Missouri (2) University of Lausanne	Alan Whittington (invited)
8.45 - 9.00	314	Complex micro-textural and rheological controls on vulcanian explosion timing and magnitude at Galeras volcano, Colombia	Amelia Bain (1) Eliza Calder (1) Jackie Kendrick (2) Anthony Lamur (2) Yan Lavallee (2) Joaquin Cortes (3) Gloria Cortes (4) Diego Gomez (4) Roberto Torres (4)	(1) University of Edinburgh (2) University of Liverpool (3) Edge Hill University (4) Servicio Geologico Colombiano	Amelia Bain
9.00 - 9.15	692	New constraints on vesiculation kinetics in rhyolitic magma degassing from 4D synchrotron microtomography and novel particle-tracking during controlled heating: Implications for eruptive style and intensity	Rafael Torres-Orozco (1, 2) Nolwenn Le Gall (1, 2) Matthew J. Pankhurst (2, 3) Biao Cai (2, 4) Robert Atwood (5) Sara Nonni (2, 6) Fabio Arzilli (7) Peter D. Lee (1, 2)	(1) X-ray Imaging Facility, University College London (2) Research Complex at Harwell, Rutherford Appleton Laboratory (3) Instituto Tecnológico y de Energías Renovables (4) School of Metallurgy and Materials, University of Birmingham (5) Diamond Light Source Ltd (6) School of Materials, University of Manchester (7) School of Earth and Environmental Sciences, University of Manchester	Rafael Torres-Orozco
9.15 - 9.30	87	Parametric dependence of gas flow instability onset in lava domes	David Hyman (1) Marcus Bursik (1)	(1) University at Buffalo	David Hyman
9.30 - 9.45	758	Sill intrusion and magma eruptibility at calderas	Giovanni Macedonio (1) Flora Giudicepietro (1) Valerio Acocella (2) Laura Sandri (3)	(1) Istituto Nazionale di Geofisica e Vulcanologia, Osservatorio Vesuviano, Napoli, Italy (2) Dipartimento di Scienze, Università degli Studi Roma Tre, Roma, Italy (3) Istituto Nazionale di Geofisica e Vulcanologia, Sezione di Bologna, Italy	Giovanni Macedonio (invited)
9.45 - 10.00	748	Conduit gravity-inertia oscillation, a mechanism for very long period (VLP) seismicity at Kilauea volcano	Chao Liang (1) Josh Crozier (3) Eric Dunham (1,2) Leif Karlstrom (3)	(1) Department of Geophysics, Stanford University (2) Institute for Computational and Mathematical Engineering, Stanford University (3) Department of Earth Sciences, University of Oregon	Chao Liang
10.00 - 10.15	647	Behaviour of clinopyroxene phenocrysts during transport and storage of basaltic magmas: experimental study and implications for clinopyroxene barometry	Didier LAPORTE (1) Baptiste HADDADI (1) Olgeir SIGMARSSON (1) Antoine MATHIEU (1) Franck POINTUD (1)	(1) Université Clermont Auvergne, CNRS, IRD, OPGC, Laboratoire Magmas et Volcans, F-63000 Clermont-Ferrand, France	Didier LAPORTE
10.15 - 10.30	949	The impact of large earthquakes on volcanoes	Deepak Garg Antonella Longo Paolo Papale	INGV-Pisa	Deepak Garg

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Position	ID	Title	Author Name	Affiliations	Presenter Name
06 - 135.	169	Dynamics of volcanic ash generation within the conduit: Effects of componentry, particles size and conduit geometry	Joali Paredes-Mariño (1) Bettina Scheu (2) Cristian Montanaro (3) Alejandra Arciniega (4) Donald B Dingwell (2) Diego Perugini (1)	(1) Dep. Physics and Geology, University of Perugia, Italy (2) Geo- und Umweltwissenschaften, Ludwig-Maximilians-Universität München, Germany (3) School of Environment, University of Auckland, New Zealand (4) Departamento de Vulcanología, Instituto de Geofísica, UNAM, México.	Joali Paredes-Mariño
06 - 136.	175	The 1906 Vesuvius eruption: highlight on eruptive mechanisms through ashes analyses and historical evidence	Elena Cubellis* Aldo Marturano* Lucia Pappalardo*	* Istituto Nazionale di Geofisica e Vulcanologia - Sezione di Napoli, Osservatorio Vesuviano	Elena Cubellis
06 - 137.	499	Experimental determinations of H2O and CO2 solubilities in ultrapotassic melts	Maximilian Schanofski (1) Sara Fanara (1) Burkhard Schmidt (1)	(1) Institute of Mineralogy, Georg-August-University of Goettingen	Maximilian Schanofski
06 - 138.	608	X-ray microtomographic investigation to explore magma mixing as eruption trigger: the 4.1 B.P. Agnano Monte Spina (Campi Flegrei, Italy) plinian eruption case study.	Carlo Pelullo (1,2) Lucia Pappalardo (2) Paola Petrosino (1)	(1) DiSTAR - Dipartimento di Scienze della Terra, dell'Ambiente e delle Risorse - Università degli Studi di Napoli Federico II, Complesso Universitario di Monte Sant'Angelo via Cinthia 26 80126 Napoli. (2) Istituto Nazionale di Geofisica e Vulcanologia, Sezione di Napoli - Osservatorio Vesuviano, Via Diocleziano, 328, I-80124 Napoli, Italy	Carlo Pelullo
06 - 139.	708	Vulcanian explosion triggers at Tungurahua volcano, Ecuador: The July 14th 2013 eruption	Elizabeth Gaunt (1) Patricia Mothes (1) John Browning (2) Philip Meredith (2)	(1) Instituto Geofísico, Escuela Politécnica Nacional, Quito, Ecuador (2) Rock and Ice Physics Laboratory, Department of Earth Sciences, University College London	Elizabeth Gaunt
06 - 140.	751	Pre-eruptive magmatic processes associated with the 2016-2018 explosive activity of Sabancaya volcano (Peru)	Nélida Manrique(1) Marco Rivera(1) Pablo Samaniego(2) Céline Liorzou(3)	(1) OVI, Observatorio Vulcanológico del INGEMMET (2) Laboratoire Magmas et Volcans, Université Clermont Auvergne-CNRS-IRD (3) Laboratoire Domaines Océaniques, Université de Bretagne Occidentale	Nélida Manrique
06 - 141.	759	Cryptic magma recharge controlling the intensity of basaltic eruptions during the twentieth century at Villarrica Volcano	Christian Pizarro 1, 2 Miguel Ángel Parada 1, 2 Claudio Contreras 3	1 Departamento de Geología, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile, 803 Plaza Ercilla, 8370450 Santiago, Chile. 2 Centro de Excelencia en Geotermia de los Andes (CEGA), Universidad de Chile, 803 Plaza Ercilla, 8370450 Santiago, Chile. 3 School of Earth Sciences, University of Bristol, Wills Memorial Building, Bristol BS8 1RJ, UK	Christian Pizarro
06 - 142.	925	Pre-eruptive conditions at the Colli Albani Volcano: experimental constraints from phase equilibria studies on a leucititic magma.	Sara Fanara (1) Burkhard Schmidt (1)	(1) Institute of Mineralogy, Georg-August University of Goettingen	Sara Fanara
06 - 143.	981	Phase equilibria experiments on a trachyte and a trachybasalt from the Campi Phlegrei Volcanic District (Italy)	Sara Fanara (1) Roman Botcharnikov (2) Danilo Palladino (3) Harald Behrens (4)	(1) 1 Institut für Mineralogie, Georg-August Universität Göttingen (2) Institute of Geosciences, Johannes Gutenberg University Mainz (3) Dipartimento di Scienze della Terra, La Sapienza Università di Roma (4) Institute of Mineralogy, Leibniz University of Hannover	Sara Fanara
06 - 144.	995	Analysis of petrographic patterns of Vesuvius and Campi Flegrei rocks through unsupervised neural networks	Antonietta M. Esposito (1) Flora Giudicepietro (1) Lucia Pappalardo (1) Gianmarco Buono (1,2)	(1) Istituto Nazionale di Geofisica e Vulcanologia, Sezione di Napoli Osservatorio Vesuviano, Italy (2) Università degli Studi di Napoli Federico II, Napoli, Italy	Antonietta M. Esposito
06 - 145.	1007	Eruptive dynamics during low-magnitude event at Campi Flegrei (Italy): the AD 1538 Monte Nuovo eruption case study	Gianmarco Buono (1) Giovanni Macedonio (2) Lucia Pappalardo (2)	(1) University of Naples Federico II, Department of Earth, Environmental and Resources Science, Italy (2) Istituto Nazionale di Geofisica e Vulcanologia, Osservatorio Vesuviano, Italy	Gianmarco Buono
06 - 146.	1013	Rapid carbonate assimilation as eruption trigger: new insights from a Somma-Vesuvius (Italy) plinian eruption	Gianmarco Buono (1) Benjamin Edwards (2) Lucia Pappalardo (3) Paola Petrosino (1)	(1) University of Naples Federico II, Department of Earth, Environmental and Resources Science, Italy (2) Dickinson College, Department of Earth Sciences, USA (3) Istituto Nazionale di Geofisica e Vulcanologia, Osservatorio Vesuviano, Italy	Gianmarco Buono