

Session Program

11-12 Feb 2020

Physics of Volcanoes 2020
Subsurface & Surface Processes

Geomatikum, H2
Bundesstraße 55, 20146 Hamburg

Tuesday 11 February

09:10

Subsurface & Surface Processes: SSP one

Session | **Location:** Geomatikum, H2, Bundesstraße 55, 20146 Hamburg | **Convener:** Dr Thor Hansteen

09:10–09:28

Seismological and geophysical signatures of the deep crustal magma systems of volcanic fields beneath the Eifel, Germany

Speaker

Prof. Torsten Dahm

09:28–09:46

Advances in seismic tomographic imaging of magmatic systems

Speaker

Luca De Siena

09:46–10:04

Imaging active magmatic systems at Oldoinyo Lengai volcano (Tanzania) via earthquake distribution and seismic scattering and absorption mapping

Speaker

Dr Miriam Christina Reiss

10:04–10:22

Virtual Transient Electromagnetics at Stromboli Volcano, Italy

Speaker

Carolin Schneider

10:22–10:40

Analytical and numerical optimization of gravimetric networks: case study Mount Etna, Italy

Speaker

Dr Mehdi Nikkhoo

10:40

Wednesday 12 February

09:00

Subsurface & Surface Processes: SSP two

Session | **Location:** Geomatikum, H2, Bundesstraße 55, 20146 Hamburg | **Conveners:**
Dr Corrado Cimarelli, Mr Jost v.d. Lieth

09:00–09:18

From Yellowstone to Australia: Identifying mechanisms for generating low-δ18O silicic magmas on Earth

Speaker

Dr Juliana Troch

09:18–09:36

The role of a pre-eruptive fluid phase for the volatile budget and atmospheric influence of large explosive eruptions in Central America

Speaker

Thor Hansteen

09:36–09:54

Multi-spectral analyses (LIBS, Raman and VIS/NIR) of planetary analog material on volcanic deposits (Vulcano Island, Italy)

Speaker

Gianluigi Ortenzi

09:54–10:12

Bubble nucleation and growth in H₂O-CO₂ bearing, ultrapotassic melts

Speaker

Maximilian Schanowski

10:12–10:30

MORB Rheology: Experimental Insights on the Mid-Atlantic Ridge

Speaker

Arianna Soldati

10:30

11:30

Subsurface & Surface Processes: SSP three

Session | **Location:** Geomatikum, H2, Bundesstraße 55, 20146 Hamburg | **Conveners:**
Prof. Boris J.P. Kaus, Jörg Hasenclever

11:30–11:48

Numerical investigation of multi-phase flow in saline submarine hydrothermal systems

Speaker

Jörg Hasenclever

11:48–12:06

3D Geodynamic Models of the Present-Day Altiplano-Puna Magmatic System

Speaker

Arne Spang

12:06-12:24

CFD modeling of ascending strombolian gas slugs through a constricted volcanic conduit considering a non-linear rheology

Speaker

Mr Nils Steinau

12:24-12:42

Critical fluid volumes to start self-sustaining fracture ascent

Speaker

Mr Timothy Davis

12:42-13:00

Forecasting vent location by probabilistic inversion of volcanic edifice stresses

Speaker

Dr Eleonora Rivalta

13:00