



## PROGRAM:

| DAY 1<br>September<br>2025   | Time (CAT)  |   | Abstract  |
|--|-------------|---|---|
|  | 8:30-9:00   | Badge Collection                        |   |
|  | 9:00-9:30   | <b>Opening Ceremony</b>                 | -M. Stéphane Le Brech,<br>1er Conseiller, French<br>Embassy in Rwanda<br>- Mrs Juliet Kabera,<br>Director general, REMA<br>- Mrs H. Christine<br>Niyotwambaza, Director<br>General, MINEMA<br>-Dr. Ozlem Adiyaman,<br>IGCP head of<br>programme, UNESCO-<br>on-line |
| <b>Session 1:<br/>Multi-phase<br/>volcanic flows<br/>(V. Pinel &amp; S.<br/>Massaro)</b> | MORNING     |   |   |
|  | 9:30-10:30  | <b>Keynote Speaker:</b><br>Andrew Woods | Multiphase volcanic<br>flows  |
| Coffee Break   |             |   |   |
|  | 11:00-11:45 | Alison Rust                             | The origins of magma<br>bubble and crystal<br>textures and applications<br>to correlating deposits<br>and inferring past<br>eruption conditions   |
|  | 11:45-12:30 | Antonio Costa                           | Rheology of Crystal-Rich<br>Magmas  |
| Lunch  |             |   |   |
| <b>Session 1:<br/>Multi-phase<br/>volcanic flows<br/>(V. Pinel &amp; S.<br/>Massaro)</b> | AFTERNOON   |   |   |
|  | 14:00–14:45 | Andrew Hoggs                            | Modelling the interaction<br>of lava flows with<br>topography and barriers  |
|  | 14:45-15:30 | Catherine Meriaux                       | Numerical modelling of<br>lava domes  |

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| Coffee Break |             |                |  |
|              | 16:00-16:15 | Group Photo    |  |
|              | 16:15-18:00 | Poster Session |  |

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| DAY 2<br>September<br>2025   | Time (CAT)  |   | Abstract  |
| <b>Session 2:<br/>Magma<br/>Subsurface<br/>propagation<br/>(C. Mériaux &amp;<br/>A. Costa)</b>                     | MORNING     |   |   |
|  | 9:30-10:30  | <b>Keynote Speaker:</b><br>Eleonora Rivalta | Magma pathways below<br>volcanic arcs and<br>continental rifts  |
| Coffee Break   |             |   |   |
|  | 11:00-11:45 | Virginie Pinel                              | Towards a better<br>understanding of<br>subsurface magma<br>propagation using<br>numerical and analogue<br>models, application to<br>recent eruptions of<br>Nyiragongo volcano. |
|  | 11:45-12:30 | Timothy Davis                               | Decoding lateral dyke<br>dynamics: how<br>earthquake patterns and<br>graben development<br>reveal magma<br>movement   |
| Lunch  |             |   |   |
| <b>Session 3:<br/>Seismic and<br/>Deformation<br/>signals from a<br/>volcano<br/>(V. Pinel &amp; A.<br/>Costa)</b> | AFTERNOON   |   |   |
|  | 13:45–15:45 | <b>Keynote Speaker:</b><br>Carolina Pagli   | Tracking Magma in a Rift:<br>InSAR and Seismicity of<br>the 2024–2025 Fentale<br>Diking Episode   |
|  | 14:45-15:30 | Atalay Ayele                                | Challenges of Disaster<br>Risk Management (DRM)<br>in the East African Rift   |

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|              |             |                 | System: lessons learnt from the recent Fentale-Dofen volcano seismic crisis   |
| Coffee Break |             |                 |   |
|              | 16:00-16:45 | Valerie Cayol   | Resolving traction changes on fractures   |
|              | 16:45-17:30 | Keir Derek      | Seismicity and ground motion at volcanic systems of geothermal interest: examples from Tulu Moye and Dallol in Ethiopia |
|              | 17:30-19:10 | MOVIE: FIREBALL |   |
|              | 19:10       | SOCIAL DINNER   |   |

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| DAY 3<br>September<br>2025  | Time (CAT)  |  | Abstract   |
| <b>Session 4:<br/>Volcanic<br/>emissions<br/>dispersion<br/>(A. Costa &amp; C.<br/>Mériaux)</b> | MORNING     |  |  |
|   | 8:30-9:30   | <b>Keynote Speaker:</b><br>Arnau Folch | Modelling of volcanic gas and ash emissions for eruption forecasting and probabilistic hazard assessment                                   |
|   | 9:30-10:15  | Andrew Woods                           | Dynamics of wind-blown volcanic ash and gas plumes   |
| Coffee Break  |             |  |  |
|   | 10:45-11:30 | Claudia Corradino                      | Volcanic Gas and Ash Dispersion Modeling from Geostationary Satellite Image Sequences: A Deep Learning Model for Near Real-Time Nowcasting |
|   | 11:30-12:15 | Roberto Sulpizio                       | Assessing tephra fallout hazard integrating field data and numerical modelling through probabilistic workflows                             |

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|  | 12:15-13:00 | Silvia Massaro  | Local-scale volcanic gas dispersion modelling: examples of passive and density-driven regimes |
| Lunch  |             |   |   |
| <b>Session 5:<br/>Volcanic lakes<br/>(L. Charlet &amp;<br/>C. Mériaux)</b> | AFTERNOON   |   |   |
|  | 14:30–15:30 | <b>Keynote Speaker:</b><br>Francois Darchambeau   | Volcanic Risk and Methane Extraction in Lake Kivu: A Delicate Trade-Off                       |
|  | 15:30-16:15 | Julyan Cartwright   | Bubble Plumes in Nature   |
|  | 16:15-16:45 | Open discussion   |   |
| Coffee Break   |             |   |   |
|  | 17:15-18:00 | Discussion on EAIFR Capacity Building (Speakers) Chairs: Edward Ntim Gasu & Catherine Meriaux | Discussion how to make your PhD successful (Participants) Chairs: EAIFR PhD Students          |

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| DAY 4<br>September<br>2025  | Time (CAT)  |   | Abstract  |
| <b>Session 6:<br/>Volcanic particle &amp; soils<br/>(A. Costa &amp; C. Meriaux)</b> | MORNING     |   |   |
|   | 9:00-10:00  | <b>Keynote Speaker:</b><br>Benjamin Gilbert | Formation and Properties of Nanoparticles in Earth Systems  |
| Coffee Break  |             |   |   |
|   | 10:30-11:15 | Guillaume Nyagatare                         | Balancing Productivity and Plant Health: A Field Evaluation of Tillage and Mulching Practices in Rwandan Andosols |

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|  | 11:15-12:00      | Vicky Ryganzu                                | Spatial variability and function of soil properties in the pedo-geomorphological processes of western and Northern Rwanda |
|  | 12:00-12:45      | Laurent Charlet                              | The physics of nanoparticles present in volcanic soils: impact on fertility and erosion susceptibility                    |
| <b>Lunch</b>   |                  |  |   |
| <b>Session 7: Volcanoes and Climate Change (V. Pinel &amp; C. Mériaux)</b> | <b>AFTERNOON</b> |  |   |
|  | 14:15–15:15      | <b>Keynote Speaker:</b><br>Clive Oppenheimer | Large volcanic eruptions, climate change and world history  |
|  | 15:15-15:30      | Davide ZanchettIn                            | Volcanoes and climate: piecing together the puzzle  |
| <b>Coffee Break</b>  |                  |  |   |
|  | 16:00-16:45      | Tamsin Mather                                | Why it is important to understand volcanic degassing to understand past, present and future climate and environment       |
|  | 16:45: 18:30     | MOVIE Into the Inferno                       |   |

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| DAY 5<br>September<br>2025   | Time (CAT)     |  | Abstract   |
| <b>Session 8: Health and Volcanoes (L. Charlet &amp; S. Massaro)</b> | <b>MORNING</b> |  |  |
|  | 8:30-9:30      | <b>Keynote Speaker:</b><br>Sarrafat Kazi | Lysosomal membrane permeabilization by volcanic nanotubes and other (aluminosilicate) silica particles: key physical and/or chemical |

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|              |              |                         | common inflammation mechanism to podoconiosis, silicosis and asbestosis  |
| Coffee Break |              |                         |  |
|              | 10:00: 10:45 | Mwumvaneza Mutagoma     | Climate change related diseases in Western Rwanda: the Mugonero Hospital case  |
|              | 10:45-11:30  | Alexandra Gourlan       | Stable Metal Isotopes in Medical Innovation: State of the Art and a Future Application to Podoconiosis                             |
|              |              |                         |  |
|              | 11:30-12:00  | Poster Prize            |  |
|              | 12:00: 13:00 | <b>Closing Ceremony</b> | -Dr Calatayud Paul-André, IRD<br>Representative in East Africa (Nairobi), IRD<br>Dr Barbara Akaliza, Chief Geohazards Officer, RMB |
| Lunch        |              |                         |  |
|              | AFTERNOON    |                         |  |
|              | 14:30–17:30  | Genocide Memorial       |  |