PATA is the most relevant workshop on paleoseismology and active tectonics of the INQUA Focus Group "Earthquake Geology and Seismic Hazard (IFG EGSHaz)". For first time in South America, we are honored to welcome the **10th PATA days** in the hyperarid coastal Atacama Desert, located in the active continental margin formed by the subduction of the Nazca Plate beneath the South American Plate; a unique tectonic setting for the assessment of megathrust episodes, upper-plate paleo-earthquakes, and paleotsunami records, and their relationship with surface processes and landscape evolution at Quaternary timescale.

We invite presentations on:

- ✓ Active tectonics/neotectonics
- ✓ Tectonic geomorphology
- ✓ Surface faulting
- ✓ Paleoseismology
- ✓ Archaeoseismology
- ✓ Tsunami and paleotsunami records
- ✓ Earthquake-induced landslides
- ✓ Liquefaction
- ✓ Probabilistic Seismic Hazard Assessment
- ✓ Probabilistic Fault Hazard Displacement Analysis
- ✓ Quaternary geochronology
- ✓ Shallow geophysics for seismic hazard assessment
- ✓ Remote sensing of earthquake deformation (LiDAR, InSAR)

The **PATA DAYS** will be held in the Hornitos Resort (https://www.cajalosandes.cl/turismo-y-recreacion/centros-turisticos/hornitos), which is emplaced on an uplifted Late Quaternary marine terrace. One day pre-and post-meeting field trips are included to visit fault scarps related to the Atacama Fault System, faulted and uplifted marine terraces and coastal geomorphology. Additionally, the 2020 PATA workshop includes an optional post-meeting fieldtrip to visit historical and prehistorical coastal records of large tsunamigenic megathrusts and upper-plate fault activity.

For connecting in-and-out flights there is the Cerro Moreno Airport in Antofagasta, located 70 km from Hornitos Resort and 26 km from Antofagasta city. Flights operating from Santiago Airport to Antofagasta by Latam airline

and Sky airline. The participants will be transported from Cerro Moreno Airport to Hornitos Resort by bus, details in the Second Circular of 2020 PATA DAYS Workshop.

Deadlines:
-December 9, 2019; Initial registration and submit 300-word Abstract
-March 15, 2020 submit 4-page extended abstract and early registration

Costs per participants

The room capacity of the venue is around of 150 persons, therefore there is a limitation of the participant number.

Alternative 1: 712 US Dollars (636 Euros) Full accommodation in Hotel Hornitos (shared superior/double rooms) including meals (breakfast, lunch, dinner), pre-meeting field trip "Coastal Uplift and Normal Faults in the Mejillones Peninsula" and post meeting "Paleoseismology of the Atacama Fault System"

Alternative 2: 669 US Dollars (597 Euros) Full accommodation in Hotel Hornitos (shared standard/double rooms) including meals (breakfast, lunch, dinner), pre-meeting field trip "Coastal Uplift and Normal Faults in the Mejillones Peninsula" and post meeting "Paleoseismology of the Atacama Fault System"

Alternative 3: 599 US Dollars (535 Euros) Full accommodation in Hotel Hornitos (shared cabinet) including meals (breakfast, lunch, dinner), pre-meeting field trip "Coastal Uplift and Normal Faults in the Mejillones Peninsula" and post meeting "Paleoseismology of the Atacama Fault System"

Alternative 4: 547 US Dollars (489 Euros) Accommodation in Hornitos Village (shared cabinet) including meals (breakfast, lunch, dinner), pre-meeting field trip "Coastal Uplift and Normal Faults in the Mejillones Peninsula" and post meeting "Paleoseismology of the Atacama Fault System"

Post Meeting Field Trip

"Subduction earthquake processes, near surface ruptures and Quaternary landscape evolution in the northern Chilean forearc, field trip in memorial of Luc Ortlieb"

-Geoarcheological records of large historic and prehistoric subduction earthquakes and tsunamis
-Historical tsunami sites and impact of the last M_w 8.8 1877 earthquake
-Earthquake and coastal uplifting
-Quaternary upper plate fault activity (normal fault, reverse fault and strike-slip fault)
-Coseismic cracks during subduction earthquakes
-Surface processes in the most hyperarid desert on Earth

Chaired by
Gabriel González (ggonzale@ucn.cl)
Gabriel Vargas (gvargas@ing.uchile.cl)

Sponsors
INQUA-TERPRO Commission
Universidad Católica del Norte
Universidad de Chile