Chiara Colombero

PhD - Earth Sciences

Fixed-term research assistant (RUTDa)

Date of birth: 18/08/1988

Nationality: Italian



Department of Land, Environment and Infrastructure Engineering – Politecnico di Torino

C.so Duca degli Abruzzi, 24 10129 TORINO (TO), Italy

+39 0110907669 +39 3297857620

chiara.colombero@polito.it

RESEARCH TOPICS

Applied Geophysics, Seismology, Engineering Geology and Rock Mechanics

RESEARCH ACTIVITY

Passive seismic methods for rock-mass, landslide and glacier monitoring: ambient seismic noise and microseismicity analyses.

Acquisition and processing of geophysical data for engineering geology, hydrogeological investigations, environmental engineering, archaeological research, geothermal processes...

TEACHING ACTIVITY

Innovation Lab for Climate Change/Teaching assistant in Applied Geophysics, Exploration Geophysics and Geophysics (BD)

EDUCATION

March 2017

PhD

@ Doctoral School of Sciences and Innovative Technologies (UNITO)

Thesis in Applied Geophysics: "MICROSEISMIC STRATEGIES FOR CHARACTERIZATION AND MONITORING OF A POTENTIALLY UNSTABLE ROCK MASS"

December 2012

MD in Environmental and Engineering Geology

@ Department of Earth Sciences (UNITO)

October 2010

BD in Geological Sciences

@ Department of Earth Sciences (UNITO)

LANGUAGES

Italian, English, French

Previous Activities

July 2017-March 2018

Post-Doc Research Fellow @ Department of Earth Sciences (UNITO): Site and lab geophysical characterization of Mexican geothermal reservoirs within the GEMex project (H2020-LCE-2016-RES-CCS-RIA)

September 2016

Visiting research PhD student @ Rock Mechanics Laboratory, University of Portsmouth (UK) – acquisition and processing of AEs recorded during triaxial deformation of granite samples under temperature constraints.

February-November 2015

Visiting research PhD student @ ISTerre, University of Grenoble (France) – Spectral analysis and cross-correlation of ambient seismic noise for monitoring purposes; modal/thermal analysis of unstable rock masses; propagation of surface waves in fractured media

Latest publications

Colombero C., Baillet L., Comina C., Jongmans D., Larose E., Valentin J. and Vinciguerra S. (2018): Integration of ambient seismic noise monitoring, displacement and meteorological measurements to infer the temperature-controlled long-term evolution of a complex prone-to-fall cliff. GJI, 213(3), 1876-1897. DOI: 10.1093/gji/ggy090

Colombero C., Comina C., De Toma E. and Godio A. (2019): *Ice Thickness Estimation from Geophysical Investigations on the Terminal Lobes of Belvedere Glacier (NW Italian Alps)*. Remote Sensing, 11(7): 805. DOI: 10.3390/rs11070805

Colombero C., Elia D., Meirano V. and Sambuelli L. (2019): Magnetic and radar surveys at Locri Epizephyrii: A comparison between expectations from geophysical prospecting and actual archaeological findings. Journal of Cultural Heritage, 11 pp. DOI: 10.1016/j.culher.2019.06.012

Colombero C., Comina C. and Socco L.V. (2019): Imaging near-surface sharp lateral variations with surface-wave methods — Part 1: Detection and location. Geophysics, 84(6), EN93-EN111. DOI: 10.1190/GEO2019-0149.1



http://orcid.org/0000-0001-9818-7464

