

ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO

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**[Lorenzo Gemignani]
CURRICULUM VITAE**

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	GEMIGNANI
NOME	LORENZO
DATA DI NASCITA	[17, Agosto, 1985]

**INSERIRE IL PROPRIO CURRICULUM
(non eccedente le 30 pagine)**

Inserisci anche i progetti a cui hai partecipato i seminari a cui sei stato invitato i corsi che dato etc.

Data

20.02.2019

Luogo

Berlino

Lorenzo Gemignani

Lorenzo Gemignani, Dr.

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Languages

Italian	Native	<i>Mother Tongue</i>
English	Advanced	<i>Working proficiency</i>
French	Advanced	<i>Working proficiency</i>
Dutch	basic	<i>Colloquial</i>

Education

2013-2018 **Ph.D. in Earth Science**, *Vrije Universiteit Amsterdam*, Amsterdam, Netherlands
Granted by Marie Curie Action, EU FP7 (grant agreement no 316966).

Main activity

- Field mapping geology, structural geology analysis, sedimentary basin analysis and sampling.
- Watershed analysis
- Electron Microprobe analysis
- Ar-Ar and Fission-track radio isotopic dating
- Development of analytical techniques for Noble Gas mass-spectrometry
- Numerical modeling
- Paleo - magnetic profile of the syn-tectonic sedimentary sequences, Remi Section (NW India)
- Tutoring undergraduate and master students during courses and thesis preparation.

2009–2011 **MSc, Geological Science and Technology**, *Università di Pisa*, Pisa, Italy

2007 **Scholarship "Pierre et Marie Curie"** University, Paris, France

Granted by Socrates-Erasmus interchange program

2005-2009 **BSc, Earth Sciences**, *Università degli Studi di Milano*, Milan, Italy

2000-2005 **Maturità Classica**, *Liceo Classico G. Parini*, Milan, Italy

Internships

2014 **Radio Isotope Dating Techniques**, *VU Amsterdam and ThermoFisher Scientific*, Bremen, Germany

2013 **Surface Processes**, *ISTerre, Grenoble, France* lead by Prof. Jean Braun and Prof. Peter van der Beek.

2010 **Basic of Gravimetry**: data acquisition and processing for Oil and Gas exploration, *Università di Trieste; OGS, Italy*

2009 - 2010 **GIS and Cartography**, *Università di Pisa; Pisa, Italy*

Research experience

Current position

November 2018 **Post-Doc Associate Researcher, Responsible of the fission-track laboratory, Tectonic and Sedimentary System, FU Berlin, Germany.**

Previous academic positions

2016 - 2018 **Scientific Researcher, VU Amsterdam, the Netherlands.**

2017 - 2018 **Lecturer, University of Torino, Italy.**

- Teaching classes and basic of laboratory analysis to undergraduate students.
- Field work classes of the fold and thrust belt, Sicily.

Current Research Project

- AlpArray Mountain building processes - EU founded research project.
- Variscan orogeny in the Mediterranean area: in collaboration with Ar- Laboratory VU Amsterdam, the Netherlands, and University of Torino, Turin, Italy.

Completed Grants / Fellowship

- MiNeRAL - Erasmus +EU founded research project, University of Torino, Turin, Italy.
- iTECC by the FP7/People/2012/ITN, grant316966.

Teaching activity

- Geological Maps and Profile II (3 CPU) - Master's program
- Advanced geological mapping (6 CPU) - Master's program
- Laboratory methods for structural geology and thermochronology (3CPU) - Master's program

Ph.D. Theses

- MSc. Mark Grund, Tectonic evolution of the SPNF, Northern Dinarides. (FU-Berlin).
- MSc. Julian Hülsher, Source to sink analysis of the Molasse Foreland basin. (FU-Berlin).

Msc and Master theses Theses

- MSc. Thomas van Gerve, Ar-dating of the eastern himalaya, implication for provenance studies.

Invited Talks

- 12/2018 Institute colloquium, Potsdam-University, Potsdam, Germany.
- 04/2018 Institute symposium, Università degli Studi di Torino, Turin, Italy.
- 07/2018 Institute symposium, ISTerre, Grenoble, France.
- 03/2017 Institute symposium, LAC - Lancaster, UK.

Congress committee

2016 **Scientific and Organisation committee**, *HKT*, 2016, Aussois, France

International Field Work

- 2017: Guide to fold and thrust belt geology, an example from East Sicily (Mineral project, 3 weeks).
- 2015: Yanmou basin, Hunnan-Sichuan , China (iTECC project, 5 weeks).
- 2014: Inside Himalayan lakes, Western Nepal (iTECC project, 8 weeks).
- 2013: Arunachal Pradesh and Assam, India (iTECC project, 9 weeks).
- 2013: Eastern Alps: Austria, Switzerland, Italy, Slovenia (iTECC project, 2 weeks).
- 2010: Himalaya, Nepal (PRIN 2010, 8 weeks)

Technical Experiences

2012–2013 **Consultant geologist**, *Project ENOF (Algeria)*, Geofield srl., San Miniato (Pi), Italy.

- Ore deposit evaluation and mine planning.
- Independent technical reporting, due diligence.

2011–2013 **Geophysics data surveys team leader**, *Geoenergy srl.*, Cascina (Pi), Italy.

- Gravity meter planning and data acquisition.
- Low Frequency Passive Seismic Spectroscopy data acquisition.

Skills

Analytical field geology

- Field work analysis of structural data, structural analysis of rocks fabric and kinematic, surface processes and geo-structural mapping .
Field Technology: geologic compass, GPS and GNSS receivers; FieldClino by Mid land valley, Qfield by QGis; Surface seismometer Guralp; Gravimeter Shintrex GC5.
- Micro-structural analysis with optic microscopy

Analytical Chemistry

- Ar-Dating and fission tracks radio-isotopic dating.
- Isotope Ratio Mass Spectrometry.
Technology: Helix plus MC, ARGUS VI; Thermo Fisher Scientific
- Mass spectrometry
- Gas chromatography

Geophysics/Geology

- Exploration geophysics: passive seismic, gravimetry analysis
- Geographical Information System (GIS)
- GPS and GNSS: cartographic analysis/geological mapping

Management activity

- Project leading
- Team organization
- Field expedition organization.
High altitude (>4000 m a.s.l) and remote area field expeditions

Molecular and atomic spectrometry

- Noble-Gas Mass Spectrometry ($^{40}\text{Ar}/^{39}\text{Ar}$)
- Scanning Electron Microscopy (EMP and SEM)
- GC/MS quadrupole ion-trap analyzer
- Fission track analysis (zircon - apatite)
- ICP-MS spectrometry
- LA ICP-MS spectrometry

Informatics

- Linux and Windows OS
- Microsoft Office, Open Office
- Adobe suite Illustrator and Photo-shop
- GIS (ArcGIS, QGIS)
- Languages: Matlab and R (basic)
- \LaTeX

Publication

Peer- Reviewed publications

- Gemignani, L., Kuiper, F.K., Wijbrans, J., Xilin Sun, Santato, A., (in press), Improving the precision of single grain mica $40\text{Ar}/39\text{Ar}$ -dating on smaller and younger muscovite grains: application to provenance studies. *Chemical Geology*.
- Najman, Y., Mrk, C., Barfod, D., Carter, A., Parrish, A., Chew, D., Gemignani, L., (in Press), Spatial and temporal trends in exhumation of the Eastern Himalaya and syntaxis as determined from a multi-technique detrital thermochronological study of the Bengal Fan. *GSA Bulletin*.
- Gemignani, L., Beek van der, P., Braun, J., Najman, Y., Bernet, M., Garzanti, E.A., Wijbrans R.J., (2018). Downstream evolution of the thermochronologic age signal in the Brahmaputra catchment (eastern Himalaya): implications for the detrital record of erosion. *EARTH AND PLANETARY SCIENCE LETTERS* n. 499, DOI: 10.1016/j.epsl.2018.07.019.
- Braun J, Gemignani, L., Beek van der, P. (2018). Extracting information on the spatial variability in erosion rate stored in detrital cooling age distributions in river sands. *EARTH SURFACE DYNAMICS DISCUSSIONS*, vol. 6, p. 257-270, ISSN: 2196-6338
- Zhuang, G., Najman, Y., Tian, Y., Carter, A., Gemignani, L., Wijbrans, J., Qasim, M.J., Asif Khan, J. M. (2018). Insights into the evolution of the Hindu Kush-Kohistan- Karakoram from modern river sand detrital geo- and thermochronological studies. *JOURNAL OF THE GEOLOGICAL SOCIETY*, ISSN: 0016-7649, doi: <https://doi.org/10.6084/m9.figshare.c.4124573>
- Gemignani, L., Sun, X., Braun, J., Gerve van der, T.D., Wijbrans, J. R., (2017). A new detrital mica $40\text{Ar}/39\text{Ar}$ dating approach for provenance and exhumation of the Eastern Alps. *TECTONICS*, vol. 36, p. 1521-1537, ISSN: 1944-919404.
- Carosi, R., Montomoli, C., Iaccarino, S., Massonne, H., Rubatto, D., Langone, A., Gemignani, L., Visonà, D. (2016). Middle to late Eocene exhumation of the Greater Himalayan Sequence in the Central Himalayas: Progressive accretion from the Indian plate. *GEOLOGICAL SOCIETY OF AMERICA BULLETIN*, vol. 128, ISSN: 0016-7606, doi: 10.1130/B31471.1
- Carosi, R., Gemignani, L., Godin, L., Iaccarino, S., Larson, K.P., Montomoli, C., Rai, S.M. (2014). A geological journey through the deepest gorge on earth: The kali gandaki valley section, west-central nepal. *JOURNAL OF THE VIRTUAL EXPLORER*, ISSN: 1441-8142, doi: 10.3809/Jvirtex.vol.2014.052.

Published thesis

- Gemignani, L., (2018). Extracting erosion and exhumation patterns from detrital thermochronology, an example from the eastern Himalaya. PhD Thesis Manuscript, in English, 186 pages, ISBN: 978-90-9030865-4.
- Gemignani, L., (2011). La zona di taglio Kalopani KSZ (massiccio dell'Annapurna, Mustang, Nepal): analisi strutturale e geocronologia. MSc Dissertation, in Italian, 126 pages.

Selected Abstracts

- Gemignani, L., Peacock, D., Jessell, M., Carosi, R., (2018). TecTask “OpenTerminology”, a public debate regarding geological terminology for Geoscientists. In: Yorsget, Montgenevre, France 2-6 July, 2018. Yorsget Abstract.
- Gemignani, L., Beek van der, P., Najman, Y., Braun, J., Garzanti, E.F., Bernet, M., Wijbrans, J. R., (2017). Long term and present-day erosion of the Eastern Himalaya as detected by detrital thermochronology. Geophysical Research Abstracts, Vol. 19, EGU2017-13123, EGU general Assembly 2017.
- Gemignani, L., Sun X, Braun J, Gerve van der T, Wijbrans J R, (2017). Detrital mica $40\text{Ar}/39\text{Ar}$ approach for provenance and exhumation of the Eastern Alps. Geophysical Research Abstracts, Vol. 19, EGU2017-4562, 2017, EGU General Assembly 2017.
- Van Der Beek, P. A.; Govin, G.; Najman, Y.; Millar, I.; Bernet, M.; Gemignani, L.; Pascale, H.; Wijbrans, J. R.; Dupont Nivet, G., (2017). Onset of Rapid Exhumation in the Namche Barwa Syntaxis Constrained by Detrital Thermochronology. American Geophysical Union, Fall Meeting 2017, abstract T12A.
- Gemignani, L., Wijbrans, J.R., Najman, Y., Beek van der, P., Bernet, M., (2016). Downstream Evolution of the Eastern Himalayan Detrital Signal as Recorded by Thermochronology in the Tsangpo–Siang–Brahmaputra River Sediments. In: Himalayan–Karakorum–Tibet Workshop, Aussois, France.
- Gemignani, L., Wijbrans, J.R., Najman, Y., Beek van der, P., (2015). Intense dilution of the Eastern Himalayan syntaxis detrital signal as recorded by thermochronology in the Yarlung-Siang-Brahmaputra river sediments. American Geophysical Union, Fall Meeting 2015, abstract id. V33D-3125.