

CURRICULUM VITAE OF ALESSANDRO FONTANA

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Biographic information

Alessandro Fontana (1975) is assistant professor in the Department of Geosciences at the University of Padova. He is a geomorphologist and Quaternary geologist with interest in the geomorphology of the alluvial and coastal environments and in the geoarchaeological aspects. His research focused on the interplay between fluvial systems, sea-level variations and ancient human settlements.

Laurea cum laude in Geological Sciences (1999) and PhD in Man and Environment (2003) at the University of Padua. Research fellow and surveyor of the Geological Map of Italy (2004-06), since 2006 assistant professor in Physical Geography and Geomorphology at the Department of Geography of Padova; since 2012 at the Department of Geosciences. He is responsible of the course of Applied Geomorphology for master in Geology since 2007 and, since 2013, he has the habilitation for the position of associate professor in Geomorphology in Italy. He was secretary of AIQUA (Italian Association of Quaternary Sciences) in 2009-2012 and, since 2016, he is secretary of the "HEX: Palaeohydrology and fluvial archives - extreme and critical events" (1622F), an International Focus Group of INQUA.

Geomorphologist with experience in Quaternary geology, pedology and geoarchaeology, dealing with the Late Pleistocene and Holocene evolution of alluvial and coastal-lagoon environments through field survey, boreholes, remote sensing and geophysical investigations. Interested in reconstruction of sea-level change through geomorphological, stratigraphical and archaeological indicators; expert in geomorphological and geological mapping, director of the survey of several sheets of the Geological technical Map of the Friuli Venezia Giulia Region. He mainly studied the Late Pleistocene and Holocene evolution of the Venetian-Friulian Plain and of the Adriatic Sea, but joined also some missions abroad (Hungary, Burkina Faso, Croatia, Slovenia, Monte Negro). He supervised the geoarchaeological study of about 60 archaeological excavations and, in collaboration with CNR-ISMAR (Bologna), he joined 5 oceanographic missions in Adriatic on research vessel Urania.

Main research projects and contracts:

- 1999-2013 Projects funded by the Geological Survey of the Province of Venice: **Project DOGE-LEO** (Geomorphological Map), **Project Geo-SINPAV** (Map of the Geological Units), **Project IDRO** (Hydrological systems), Project Soil Map.
- 2001-2008 **Project CARG (New Geological Map of Italy)**, sheet 086, funded by Regione Autonoma Friuli Venezia Giulia.

- 2002-2011 **Project CARG (New Geological Map of Italy)**, sheet 107, funded by Regione Veneto.
- 2004-2010 **Project CARG (New Geological Map of Italian Seas)**, sheet NH-33L, funded by ISPRA (Istituto Superiore Protezione e Ricerca Ambientale).
- 2007-2009 **PRIN-2005 (Environmental and climatic crisis, catastrophes and human communities during the Holocene: a geoarchaeological approach)**. Funded by Italian Ministry of Research and University.
- **2008-2009 Project Altinum (Non-invasive investigations for the assessment of the archaeological and palaeoenvironmental resources in Altinum)**, funded by Regione Veneto.
- 2008-2011 **Project Unipd CPDA077247 (Erosive and depositional processes in the Piave River basin in relation with the climatic variations and the human impact since the LGM)**; funded by University of Padova.
- 2008-2012 **Excellence Project (Padova Underground: an integrated geoarchaeological investigation of the roots of the city)**, funded by CARIPARO Foundation.
- **2010-2012 Project PArSJAd (Methaproject Archaeological Park of the Northern Adriatic)**, funded by Regione Veneto.
- 2011-2013 **Project Unipd C91J10000320001 (Eustatic variation and subsidence in Northern Adriatic along the last 130,000 years through the use of geomorphological, stratigraphical and geoarchaeological markers)**, funded by University of Padova (Principal Investigator).
- 2012-2015 **Project RITMARE (Italian Research for the sea)**, Working Units of CNR-ISMAR Bologna and University of Trieste; funded by Ministero attività produttive.
- 2012-2015 **Project 1203P MEDFLOOD (Mediterranean sea level change and projection for future)**; funded by INQUA (International Union for Quaternary Science) (responsible A. Rovere, J. Benjamin, A. Fontana, S. Furlani).
- 2016-2019 **Project 1623P EX-AQUA (Palaeohydrological Extreme Events: evidence and archives)**; funded by INQUA (International Union for Quaternary Sciences) (responsible A. Fontana).

Selected publications (ORCID ID: orcid.org/0000-0003-1556-2770)

(https://www.researchgate.net/publication/280717000_Publication_List_FONTANA_ALESSANDRO)

- FONTANA A., VINCI G., TASCA G., MOZZI P., VACCHI M., BIVI G., SALVADOR S., ROSSATO S., ANTONIOLI F., ASIOLI A., BRESOLIN M., DI MARIO F., HAJDAS I. (2017) - *Lagoon settlements and relative sea level during Bronze Age in Northern Adriatic: geoarchaeological evidence and paleogeographic constraints*. *Quaternary International*. doi.org/10.1016/j.quaint.2016.12.038
- HAJDAS I., HENDRIKS L., FONTANA A., MONEGATO G. (2017) - *Evaluation of preparation methods in radiocarbon dating of old wood*. *Radiocarbon*, 1-11. Doi: 10.1017/RDC.2016.98
- ANTONIOLI F., ANZIDEI M., AMOROSI A., LO PRESTI V., MASTRONUZZI G., DEIANA G., DE FALCO G., FONTANA A., FONTOLAN G., LISCO S., MARSICO A., MORETTI M., ORRÙ P.E., SANNINO G.M., SERPELLONI E., VECCHIO A., 2017. *Sea-level rise and potential drowning of the Italian coastal plains: Flooding risk scenarios for 2100*. *Quaternary Science Reviews*, 158, 29–43.

- VACCHI M., MARRINER N., MORHANGE C., SPADA G., FONTANA A., ROVERE A. (2016) - *Multiproxy assessment of Holocene relative sea-level changes in the western Mediterranean: Sea-level variability and improvements in the definition of the isostatic signal*. *Earth-Sciences Review*, 155, 172-197.
- BENITO, G., MACKLIN, M.G., PANIN, A., ROSSATO, S., FONTANA, A., JONES, A.F., MACHADO, M.J., MATLAKHOVA, E., MOZZI, P., ZIELHOFER, C. (2015) - *Recurring flood distribution patterns related to short-term Holocene climatic variability*. *Scientific Reports* 5, 16398; 1-12.
- FELJA, I., FONTANA, A., FURLANI, S., BAJRAKTAREVIĆ, Z., PARADŽIK, A., TOPALOVIĆ, E., ROSSATO, S., ĆOSOVIĆ, V., JURAČIĆ, M. (2015) - *Environmental changes in the lower Mirna River valley (Istria, Croatia) during the Middle and Late Holocene*. *Geologia Croatica*, 68 (3), 209-224.
- ROSSATO S., FONTANA A., MOZZI P. (2015) - *Meta-analysis of the Holocene ¹⁴C database of the Venetian-Friulian alluvial plain (NE Italy)*. *Catena*, 130, 34-45. doi:10.1016/j.catena.2014.10.033
- FONTANA, A., MONEGATO, G., DEVOTO, S., ZAVAGNO, E., BURLA, I., CUCCHI F. (2014) - *Geomorphological evolution of an Alpine fluvioglacial system at the LGM decay: the Cormor type megafan (NE Italy)*. *Geomorphology*, 204, 136-153.
- FONTANA A., MOZZI P., MARCHETTI M. (2014) - *Alluvial fans and megafans along the southern side of the Alps*. *Sedimentary Geology*, 301, 150-171.
- FONTANA A. (2012) - Introduction to the thematic issue: "Alluvial Geomorphology in Italy". *Géomorphologie: Relief, Processus, Environment*, 2/2012, 123-131.
- FONTANA A., MOZZI P., BONDESAN A., DE GUIO A., KOTÉ L. (2010) - *Late prehistory and environmental changes along the Débé River in the lower Sourou valley (Burkina Faso, West Africa)*. *Il Quaternario - Italian Journal of Quaternary Sciences*, 23(2), 199-216.
- FONTANA A., MOZZI P., BONDESAN A. (2010) - *Late Pleistocene evolution of the Venetian–Friulian Plain*. *Rendiconti Lincei Scienze Fisiche e Naturali*, Volume 21, Supplement 1, 181-196.
- ANTONIOLI F., FERRANTI L., FONTANA A., AMOROSI A., BONDESAN A., BRAITENBERG C., FONTOLAN G., FURLANI S., MASTRONUZZI G., MONACO C., SPADA G., STOCCHI P. (2009) - *Holocene relative sea-level changes and vertical movements along the Italian and Istrian coastlines*. *Quaternary International*, 206, 101-133.
- CARTON A., BONDESAN A., FONTANA A., MENEGHEL M., MIOLA A., MOZZI P., PRIMON S., SURIAN N. (2009) - *Geomorphological evolution and sediment transfer in the Piave River watershed (north-eastern Italy) since the LGM*. *Géomorphologie: Relief, Processus, Environment*, 3/2009, 37-58.
- NINFO A., FONTANA A., MOZZI P., FERRARESE F. (2009) - *The map of Altinum, ancestor of Venice*. *Science*, 325, 577.
- FONTANA A., MOZZI P., BONDESAN A. (2008) - *Alluvial megafans in the Venetian–Friulian Plain (north-eastern Italy): Evidence of sedimentary and erosive phases during Late Pleistocene and Holocene*. *Quaternary International*, 189, 71-90.
- FONTANA A. (2006) - *L'evoluzione geomorfologica della bassa pianura friulana e le sue relazioni con le dinamiche insediative antiche*. *Monografie del Museo Friulano di Storia Naturale*, 46, Udine, 288 pp. Enclosed Geomorphological Map of the Low Friulian Plain, scale 1:50,000.
- BONDESAN A., MENEGHEL M., ROSSELLI R., VITTURI A., BASSAN V., BERTANI B., FONTANA A., FONTOLAN G., FURLANETTO P., MAGRI S., MOZZI P., PRIMON S. (2004) - *Geomorphological Map of the Province of Venice, scale 1:50.000*, 4 sheets, 1 CD-Rom.