

## **Maria Antonia Brovelli**

Degree with honours in Physics, PhD in Geodesy and Cartography. She is Professor of GIS and Copernicus Uptake at the Politecnico di Milano (PoliMI) and a member of the School of Doctoral Studies in Data Science at “Roma La Sapienza” University. From 2006 to 2011 she lectured GIS at the ETH of Zurich and from 1997 to 2011 she was the Head of the Geomatics Laboratory of PoliMI. From 2011 to 2016 she was the Vice-Rector of PoliMI for the Como Campus. Currently she is the coordinator of the Copernicus Academy Network for the PoliMI.

She is the chair of ISPRS WG IV/4 “Collaborative crowdsourced cloud mapping (C3M)”; member of ESA ACEO (Advisory Committee of Earth Observation); co-chair of the United Nations Open GIS Initiative, Chair of the UN-GGIM (Global Geospatial Information Management) Academic Network, mentor of the PoliMI Chapter of YouthMappers (PoliMappers).

Her research activity is in the field of geomatics. Her interests have been various, starting from geodesy, radar-altimetry and moving later to GIS, webGIS, geospatial web platform, VGI, Citizen Science and Big Geo Data. She is participating and leading research on these topics within the frameworks of both national and international projects and scientific networks. One of her main interests is in Open-Source GIS, where she is playing a worldwide leading role.

## **Research Projects**

(last 10 years)

- 2008 - 2010 PRIN: Free and open source geoservices as interoperable tools for sharing geographic data through the internet – Leader of the Politecnico di Milano Unit.
- 2010 - 2012 HeliDEM, INTERREG project Italy-Switzerland. Participant.
- 2010 - 2012 web C.A.R.T.E. – Como (web Catalogo e Archivio delle Rappresentazioni del Territorio e delle sue Evoluzioni – Como: Catalogue Service for the Web and Archive of the Territory Representations and its Evolutions ) – Sponsored by Fondazione Provinciale della Comunità Comasca Onlus – Project leader.
- 2012 - 2012 “On the exploitation and validation of COSMO-SkyMed interferometric SAR data for digital terrain modelling and surface deformation analysis in extensive urban areas” – Agreement n. I/044/09/0 Italian Space Agency and Institute for Electromagnetic Sensing of the Environment (IREA) - National Coordinator Ing. Lanari – IREA). Participant.
- 2011 - 2013 Green Move, Sustainable Mobility Project of the Politecnico di Milano for Regione Lombardia – Leader of the Geomatics area.
- 2013 - 2015 INTERREG project IT-CH 2007-2013. Project: “I CAMMINI DELLA REGINA”, ID 33829732, Misura 3.1, P.O. Cooperazione Transfrontaliera - Project leader.
- 2016-2017 GEO team on Data Validation of Global Land Cover Datasets (within GEO SB-02-02: Global Land Cover and User Engagement).
- 2016 - 2018 Erasmus + giCASES (Creating a University-Enterprise Alliance for a Spatially Enabled Society) - Leader of the Politecnico di Milano Unit.
- 2017 – Cariplo Foundation “Brezza” - Leader of the Politecnico di Milano Unit.
- 2018 - 2019 Cariplo Foundation “Mychonos” – Participant.
- 2018 ISPRS Capacity Building Initiative: “Capacity Building for High-Resolution Land Cover Inter-comparison and Validation” - Project Leader.
- 2017- 2020 Erasmus + “Geodesy and Geoinformatics for Sustainable Development in Jordan” (GEO4D) – Participant
- 2017 - 2020 MIUR (Ministry of Education, University and Research) National Project PRIN: “URBAN GEOMatics for Bulk Information Generation, Data Assessment and Technology Awareness” (URBAN GEO BIG DATA) – Project leader.
- 2018 – 2021 ESA “High Resolution Land Cover CCI +”. Leader of the Politecnico di Milano Unit.
- (Subcontractor)
- 2019-2020 INTERREG V-A project IT-CH 2014-2020 – “GIOCOOnDA” - ID 570702, Open data and public administration: design, data format transformation and geo-referencing. Participant.
- 2019-2021 INTERREG V-A project IT-CH 2014-2020 – “INSUBRIPARKS” - ID 605472, Database and applications design for the Insubric parks monitoring and touristic promotion. Leader of the Politecnico di Milano Unit.
- 2019- 2021 INTERREG V-A Italy Switzerland 2014-2020 – “SIMILE” - ID 523544, An Information System for the Integrated Monitoring of Insubric Lakes and their Ecosystem. Project Leader.
- 2019-2022 Erasmus+ project - "CIDMA" - Climate Change Induced Disaster Management in Africa. Leader of the Politecnico di Milano Unit.

- 2020-2023 Erasmus + project - "GIS4SCHOOLS" - Leader of the Politecnico di Milano Unit.
- 2021-2021 MAE – Italy-Vietnam Cooperation - Geoinformatics and Earth Observation for landslide monitoring. Project Leader.

### Awards

ISPRS President's Honorary Citation (2020)

Sol Katz Award – OSGeo (2015)

### Scientific Networks

- 2012-2016 COST Action TD1202 | Mapping and the citizen sensor
- 2012-2016 COST Action C1203 | European Network Exploring Research into Geospatial Information Crowdsourcing: software and methodologies for harnessing geographic information from the crowd (ENERGIC)
- 2016-2017 GEO team on Data Validation of Global Land Cover Datasets (within GEO SB-02-02: Global Land Cover and User Engagement).
- 2015-2019 COST Action TD1403 | Big Data Era in Sky and Earth Observation (BIG-SKY-EARTH)
- 2016-2020 COST Action CA15212 | Citizen Science to promote creativity, scientific literacy, and innovation throughout Europe

### Editor

Applied Geomatics

ISPRS International Journal of Geoinformation

### Special Issues Guest Editor

- Proceedings Workshop “WebMGS 2010: 1st International Workshop on Pervasive Web Mapping, Geoprocessing and Services”, Eds. M.A. Brovelli, S. Dragicevic, S. Li, B. Veenendaal, ISPRS Archives – Volume XXXVIII-4/W13, 2010, pp. 1-258.
- Special Issue on “Mobile Mapping for Disaster Relief”, Eds. D. Alvarez, P. Boccardo, M.A. Brovelli, M. Madden, PE&RS, October 2013, pp. 901-973.
- Theme section “Towards Intelligent Geoprocessing on the Web”, Eds. S. Li, S. Dragicevic, B. Veenendaal, Maria Antonia Brovelli, ISPRS Journal of Photogrammetry and Remote Sensing, Vol. 83, September 2013, pp. 138-204
- Proceedings Workshop WebMGS 2015, B. Veenendaal, M. A. Brovelli, and L. Wu, ISPRS Archives, Volume XL-4/W7, 2015, pp.1-45
- Proceedings “XXIII ISPRS Congress”, Commission II, Eds. L. Halounova, S. Li, V. Šafář, M. Tomková, P. Rapant, K. Brázdil, W. (John) Shi, F. Anton, Y. Liu, A. Stein, T. Cheng, C. Pettit, Q.-Q. Li, M. Sester, M. A. Mostafavi, M. Madden, X. Tong, M. A. Brovelli, K. HaeKyong, H. Kawashima, and A. Coltekin, ISPRS Archives, Volume XLI-B2, 2016, pp. 1-760.
- Proceeding “XXIII ISPRS Congress”, Commission VII, Eds. L. Halounova, F. Sunar, M. Potůčková, L. Patková, M. Yoshimura, U. Soergel, E. Ben-Dor, J. Smit, G. Bareth, J. Zhang, S. Kaasalainen, U. Sörgel, B. Osmanoglu, M. Crespi, M. Crosetto, T. Blaschke, M. A. Brovelli, and B. Zagajewski, ISPRS Archives, Volume XLI-B7, 2016, pp. 1-1006.
- Proceedings “FOSS4G-Europe 2017 – Academic Track”, Eds. M. A. Brovelli, D. Kotzinos, N. Paparoditis, and V. Raghavan, ISPRS Archives, Volume XLII-4/W2, 2017, pp. 1-178
- Proceedings “FOSS4G 2018 – Academic Track”, Eds. M.A. Brovelli and A.H. Namangaya, ISPRS Archives, Volume XLII-4/W8, 2018, pp.1-241
- Special Issue on “Web/cloud based mapping and geoinformation”, Eds. B.Veenendaal, M.A. Brovelli, S. Coetsee, P. Mooney, ISPRS International Journal of Geo-Information.
- Special Issue "Geospatial Big Data and Urban Studies", Eds. M.A. Brovelli, H. M. Abdulmuttalib, P. Mooney, C. Pettit, ISPRS International Journal of Geo-Information.
- Special Issue "State-of-the-Art in Spatial Information Science", Eds. S. Li, M.A. Brovelli, Z. Slatanova, M. Sester, , ISPRS International Journal of Geo-Information.
- Special Issue "Open Source Geospatial Science, Software and Education", Eds. A. Mobasher, H. Mitasova, M. Neteler, A. Singleton, H. Ledoux and M.A. Brovelli, Transaction in GIS.