

Warner Marzocchi

Specialisation	natural hazard assessment
Research interests	1) earthquake and eruption forecasting; 2) multi-hazard assessment; 3) decision-making related to natural events
Short curriculum vitae	<p>Graduated in Geological Sciences <i>cum laude</i> at the <i>Alma Mater Studiorum</i> University of Bologna in 1987; PhD in Physics, at the <i>Alma Mater Studiorum</i> University of Bologna in 1992.</p> <p>Chief scientist at the Istituto Nazionale di Geofisica e Vulcanologia (INGV) of Rome since 2003. Associate Professor of Physics of Volcanism at the Osservatorio Vesuviano of Naples (1998-2003). Post-doctoral Fellow in Physics at the <i>Alma Mater Studiorum</i> University of Bologna (1993-1995).</p> <p>Service and committees</p> <ul style="list-style-type: none"> - 2009. Member of the <i>International Commission on Predictability of Earthquakes</i> nominated by the chief of Dipartimento Protezione Civile after the Abruzzo earthquake on April 6, 2009. - Since 2008. Member of the <i>Disasters Advisory Group</i> in support of GEO Task US-06-01. - Since 2008. Leader of the IAVCEI Commission on <i>Statistics in Volcanology</i> (COSIV). - Since 2006. Scientific Consultant for <i>Analysis and Monitoring Environmental Risks</i> (AMRA). - Since 2005. Co-chairman of <i>World Organization of Volcano Observatories</i> (WOVO). - Since 2000. Executive committee member and project leader of volcanological and seismological INGV/DPC and Gruppo Nazionale di Vulcanologia (GNV) projects. - 2006-2008. Joint steering committee member of UNESCO GARS-IGOS. - Teaching activity at University of Bologna (1998-2007), and Lectures on statistics and natural hazard assessment at Centre d'Etude des Risques Géologiques (CERG), Université de Genève (since 2007). <p>Invited lectures and talks</p> <ul style="list-style-type: none"> - Invited speaker at Risk Management Solutions' symposium "Advances in earthquake forecasting", New York, Jan. 2008. - Invited speaker at meetings of American Geophysical Union (4), European Geosciences Union (3), International Association of Volcanology and Chemistry of the Earth's Interior (2), International Workshop on Applied Probability (1), Japan Geoscience Union (1), SSEC Annual Meeting (1), Seismological Society of America (1), Committee on Mathematical Geophysics (2). - Invited Seminar activity at University of Potsdam, University College of London, ETH-Zurich, University of Hamburg, University of Auckland, University of Roma 1 "La Sapienza", University of Roma Tre, ERI University of Tokyo.
Publications	<p>Author of more than 70 papers on JCR journals. Among the most recent we have</p> <p>MARZOCCHI ET AL., 2010. BET VH: a probabilistic tool for long-term volcanic hazard assessment. <i>Bull. Volcanol.</i>, in press. GREZIO ET AL., 2010. A Bayesian procedure for Probabilistic Tsunami Hazard Assessment. <i>Nat. Hazards</i>, in press. LINDSAY ET AL., 2010. Towards real-time eruption forecasting in the Auckland</p>

Volcanic Field: application of BET_EF during the New Zealand national disaster exercise 'Rauumoko'. *Bull. Volcanol.*, doi:10.1007/s00445-009-0311-9

MARZOCCHI W., A.M. LOMBARDI, 2009. Real-time forecasting following a damaging earthquake. *Geophys. Res. Lett.*, **36**, L21302.

LOMBARDI A.M., W. MARZOCCHI, 2009. Double Branching model to forecast the next $M \geq 5.5$ earthquakes in Italy. *Tectonophysics*, **475**, 514-523.

DANDRI ET AL., 2009. Bayesian Event Tree (BET) for eruption forecasting at Vesuvius, Italy: a retrospective forward application to 1631 eruption. *Bull. Volcanol.*, **71**, 729-745.

MARZOCCHI W., G. WOO, 2009. Principles of volcanic risk metrics: theory and the case study of Mt. Vesuvius and Campi Flegrei (Italy). *J. Geophys. Res.*, **114**, B03213.

MARZOCCHI W., 2008. Earthquake forecasting in Italy, before and after Umbria-Marche seismic sequence 1997. A review of the earthquake occurrence modeling at different spatio-temporal-magnitude scales. *Ann. Geophys.*, **51**, 405-416.

MARZOCCHI W., A.M. LOMBARDI, 2008. A double branching model for earthquake occurrence. *J. Geophys. Res.*, **113**, B08317.

FAENZA ET AL., 2008. On the spatio-temporal distribution of $M 7.0+$ worldwide seismicity with a non-parametric statistics. *Tectonophysics*, **449**, 97-104.

MARZOCCHI ET AL., 2008. BET_EF: a probabilistic tool for long- and short-term eruption forecasting. *Bull. Volcanol.*, **70**, 623-632.

MARZOCCHI W., G. WOO, 2007. Probabilistic eruption forecasting and the call for an evacuation. *Geophys. Res. Lett.* **34**, L22310.

CINTI ET AL., 2004. Probability map of the next $M \geq 5.5$ earthquakes in Italy. *Geochem. Geophys. Geosyst.*, **5**, Q11003.