



# **Personal information**

Surname(s) / First name(s)

Address(es)

Telephone(s)

Fax(es)

E-mail(s)

Nationality(-ies)

, ,

Date of birth

Gender

Desired employment / Occupational field

Work experience

Dates

Occupation or position held Main activities and responsibilities

Name and address of employer

Type of business or sector

Dates

Dates

Occupation or position held
Main activities and responsibilities
Name and address of employer

Type of business or sector

Occupation or position held
Main activities and responsibilities
Name and address of employer
Type of business or sector

FABIO SABETTA

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fabio.sabetta@uniroma3.it

Italian

M

04/17/1952

Seismic Hazard and Risk assessment.

Earthquake loss scenarios and emergency management systems

2001 - 2016

Director of the "Seismic Hazard and Risk Assessment" division

Coordination and direction of the activities concerning seismic hazard assessment and earthquake loss scenarios

Seismic and Volcanic Risk Office of the Italian Department of Civil Protection- Via Vitorchiano 4, Rome ,Italy

**Public** 

2005 - 2017

Teaching Professor

Academic course (26 hours) on Seismology and Seismic Hazard Assessment

Facoltà di Ingegneria – University Roma III – Rome, Italy (Laurea specialistica in protezione del territorio dai rischi naturali)

Public

2002 - 2006

Teaching Professor

PhD Course (60 hours) on Basics of Seismology and Seismic Hazard Assessment European School of Adv. Studies in Reduction of Seismic Risk (ROSE), University of Pavia, Italy

Public

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For more information go to http://europass.cedefop.eu.int

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Dates 1997 - 2001

Occupation or position held Deputy Director of the National Seismic Survey

Main activities and responsibilities Coordination and direction of the activities concerning seismic hazard assessment and risk

mitigatior

Name and address of employer Italian Department of "Servizi Tecnici Nazionali", Via Curtatone 3, Roma Italy

Type of business or sector Public

Dates 1980-1997

Occupation or position held Head Researcher

Main activities and responsibilities Engineering characterization of seismic ground motion

Name and address of employer Italian Agency for New Technologies Energy and Environment (ENEA), Roma, Italy

Biophysics (biological membranes models)

Type of business or sector Public

Dates 1984

Occupation or position held Visiting Scholar

Main activities and responsibilities 
Italy-U.S. cooperation in the field of Engineering Seismology

Name and address of employer Stanford University, California, U.S.

Type of business or sector Private

# **Education and training**

Dates 1975

Title of qualification awarded Degree in Physics (Laurea 110 e lode/110)

Principal subjects/Occupational skills

covere

Name and type of organisation University of Rome "La Sapienza"

Name and type of organisation providing education and training

# Personal skills and competences

Mother tongue(s)

Other language(s)

Self-assessment

European level (\*)

English Spanish

French

#### Italian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C1	C1	C2
C2	C2	C1	C1	B1
C2	C1	B2	B2	B1

<sup>(\*)</sup> Common European Framework of Reference (CEF):

http://europass.cedefop.europa.eu/LanguageSelfAssessmentGrid/en

Social skills and competences

Very good analysis/synthesis capabilities. Remarkable communication skills. Attitude for working in groups and for collaborative interactions at international level. Good experience on review of technical/scientific documentation

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# Organisational skills and competences

Extended experience in national and international research projects. More than 20 years experience in development, scheduling and lecturing of courses in the context of risk assessment and mitigation at the Italian Department of Civil Protection. Large experience in acting as a bridge between the scientific community and the public administration.  $\[mathbb{I}\]$ 

Peer Review for the Journals :Bulletin of Seismological Society of America; Bulletin of Earthquake Engineering; Journal of Earthquake Engineering; Journal of Seismology; Annali di geofisica; Bollettino di Geofisica Teorica e Applicata.

#### Technical skills and competences

Risk and multi-risk assessment and mitigation, earthquake damage scenarios and emergency management systems, probabilistic evaluation of seismic hazard, engineering characterization of seismic input, numerical processing of strong ground motion data, development of empirical predictive equations for the study of ground motion attenuation.

Author of 81 publications in scientific Journals or Conferences on engineering characterization of seismic input and evaluation of seismic hazard and risk.

### Computer skills and competences

Use of the Windows system, Microsoft office programs; technical programs: FORTRAN, ARCVIEW, ARCGIS. Expert in Geographical Information Systems.

## Other skills and competences

Participation to several assistance missions and committees in Italy, Europe and developing countries:

- Italian Reconnaissance team on the Montenegro-Yugoslavia earthquake (April 1979).
- Italian Team for help and advice after the earthquake in Yemen (May 1983).
- Technical Committee on Nuclear Safety and Health Protection (1983).
- Steering Committee of the "Training Course on Engineering Seismology" organized by ENEA and sponsored by UNESCO for participants of the developing countries (1987)
- National Commission for Environmental Research (1989).
- International Atomic Energy Agency (IAEA), (Expert for Seismic Safety Analysis, 1989-91).
- Working Group of the Scientific Research Minister for the implementation of the National Research and Training Programs (1990).
- NATO/CCMS Pilot Study on "Pollution Prevention Strategies for Sustainable Development" (Official Country Representative, 1991-93).
- Expert Commission for Seismic Risk Assessment of the Italian territory (Decree of the Department of Civil Protection 1996).
- Working Group for the reappraisal of the seismic zoning in Italy (1998).
- Task Group 3 (Seismic Risk and Earthquake Scenarios) of the European Association of Earthquake Engineering (1998).
- ENSeRVES (European Network on Seismic Risk, Vulnerability and Earthquake Scenarios) appointed by European Association of Earthquake Engineering (1999-2001).
- Project Team 1 Provision of Expert's Services for the conversion of structural Eurocode 8 from ENV to EN. European Committee for Standardization (1999-2002)
- Ground Motion Characterization in the PEGASOS Project for a new Probabilistic Seismic Hazard Analysis of the Swiss Nuclear Power Plants (2001-2004).
- GEM: Global Earthquake Model (US and China 2010-11)
- Seismic Risk Management Support Mission organized by the World Bank in Malawi and Mozambique (2012)
- European project MATRIX: New methodologies for multi-hazard and multi-risk assessment methods for Europe (FP7, 2010-2013).

Driving licence(s)

Driving for A, B, vehicle classes with no restriction

# Additional information List of Publications

#### 26 Selected publications among 81

- Sabetta, F. and A. Pugliese (1987). Attenuation of peak horizontal acceleration and velocity from Italian strong-motion records. *Bulletin of the Seismological Society of America* 77(5), 1491-1513.
- Sabetta, F. and A. Pugliese (1996). Estimation of response spectra and simulation of nonstationary earthquake ground motions, *Bulletin of Seismological Society of America*, 86(2), 337-352.
- Sabetta et al. (1999). Gruppo di Lavoro istituito dalla Commissione Nazionale di Previsione e Prevenzione dei Grandi Rischi- Proposta di riclassificazione sismica del territorio nazionale, *Ingegneria Sismica*, Anno XVI, N°1, 5-14, 1999.
- Albarello D., Bosi V., Bramerini F., Lucantoni A., Naso G., Peruzza L., Rebez A., Sabetta F., Slejko D. (2000). Carte di pericolosità sismica del territorio nazionale, *Quaderni di Geofisica*, N°12.
- Lucantoni A., Bosi V., Bramerini F., De Marco R., Lo Presti T., Naso G., Sabetta F. (2001). Il rischio sismico in Italia, *Ingegneria Sismica*, Anno XVIII, N°1, 5-37.
- Bommer J., Abrahamson N.A., Strasser F.O., Pecker A., Bard P.Y., Bungum H., Cotton F., Fäh D., Sabetta F., Scherbaum F. and J. Studer (2004). The Challenge of Defining Upper Bounds on Earthquake Ground Motions, Seismological Research Letters, Vol.75, N° 1.
- Bommer J.J., Scherbaum, Cotton F., Bungum H., and F. Sabetta (2004). Discussion 'Uncertainty analysis of strong-motion and seismic hazard' by R. Sigbjörnsson and N.N. Ambraseys. Bulletin of Earthquake Engineering, Vol. 2, N°.2.
- Sabetta F., Lucantoni A., Bommer J. and H. Bungum (2005). Sensitivity of PSHA results to ground motion prediction relations and logic-tree weights, Soil Dyn. & Earthquake Engineering Vol.25/4, 317-329.
- Bommer, J.J., F, Scherbaum, H. Bungum, F. Cotton. F. Sabetta & N.A. Abrahamson (2005). On the use of logic trees for ground-motion prediction equations in Seismic Hazard Analysis *Bulletin of Seismological Society of America*, Vol.95, N° 2, 377-389.
- Strasser F. O., Bommer J.J., Şeşetyan K., Cagnan Z., Erdik M. Irizarry J., Goula X., Lucantoni A., Sabetta F., Bal I.E., Crowley H., Lindholm C. (2008). A comparative study of European Earthquake Loss Estimation Tools for a scenario in Istanbul. *Journal of Earthquake Engineering*. Vol. 12, Issue 1, Pages: 246 - 256, ISSN: 1363-2469.
- Luzi L., Sabetta F., Hailemikael S., Bindi D., Pacor F., Mele F (2008). ITACA (ITalian ACcelerometric Archive): a web portal for the dissemination of Italian strong motion data. Seismological Research Letters. 79(5): 716-722. doi: 10.1785/gssrl.79.5.
- Sabetta F. (2008). Empirical and theoretical assessment of upper bounds on earthquake ground-motions. Book: The 1755 Lisbon earthquake revisited 250 years later – Chapter 5 pp 273-291. Springer Ed. DOI 10.1007/978-1-4020-8609-0\_17.
- Bindi D, Luzi L., Pacor F, Sabetta F. and M. Massa (2009). Towards a new reference ground motion prediction equation for Italy: update of the Sabetta-Pugliese (1996) attenuation relation. *Bulletin of Earthquake Engineering*. Vol 7 n. 3 pp 591-608. DOI 10.1007/s10518-009-9107-8.
- Luzi L., Sabetta F., Mele F. and B. Castello (2010). Italian strong motion database relative to the period 1972-2004: motivations and aims. *Bulletin of Earthquake Engineering*. Vol 8 n. 5 pp 1159-1174. DOI: 10.1007/s10518-009-9140-7.
- Akinci A., Malagnini L. and F. Sabetta (2010). Characteristics of the strong ground motions from the 6 April 2009 L'Aquila earthquake, Italy. Soil Dyn. & Earthquake Engineering. Vol 30 n. 5 pp 320-335. DOI:10.1016/j.soildyn.2009.12.006.
- Çelebi M., Bazzurro P., Chiaraluce L., Clemente P., Decanini L., De Sortis A., Ellsworth W., Gorini A., Kalkan E., Marcucci S., Milana G., Mollaioli F., Oliveri M., Rinaldis D., Rovelli A., Sabetta F and C. Stephens (2010). Recorded motions of Mw 6.3 April 6, 2009 L'Aquila Earthquake and Implications for Building Structural Damage. *Earthquake Spectra*. Vol 26 n. 651. DOI: 10.1193/1.3450317.

- Sabetta F. (2011) Abruzzo Earthquake of April 2009: seismic sequence, ground motion attenuation, simulation scenario and losses. Bolletino di Geofisica Teorica e Applicata, Vol. 52 n. 3. DOI 10.4430/bgta0015
- Pace B., Peruzza L., Visini F., Sabetta F., Albarello D., Boncio P., Galli P., Messina P., Sanò T., Dolce M. (2011). Predicted ground motion after the L'Aquila 2009 earthquake (Italy, Mw 6.3): input spectra for seismic microzoning. *Bulletin of Earthquake Engineering*, Vol. 9 n. 1 pp.199-230. DOI: 10.1007/s10518-010-9238-y.
- Pacor F.; Paolucci R.; Luzi L.; Sabetta F., Dolce M., Gorini A., De Sortis A.; Spinelli A. (2011). Overview of the Italian strong motion database ITACA 1.0. Bulletin of Earthquake Engineering. Vol 9 n. 6 pp 1723-1739.
- Sabetta F. (2011) Abruzzo Earthquake of April 2009: seismic sequence, ground motion attenuation, simulation scenario and losses. *Bolletino di Geofisica Teorica e Applicata*, Vol. 52 n. 3, pp 427-442, DOI 10.4430/bgta0015.
- Pace B., Peruzza L., Visini F., Sabetta F., Albarello D., Boncio P., Galli P., Messina P., Sanò T., Dolce M. (2011). Predicted ground motion after the L'Aquila 2009 earthquake (Italy, Mw 6.3): input spectra for seismic microzoning. *Bulletin of Earthquake Engineering*, Vol. 9 n. 1 pp.199-230. DOI: 10.1007/s10518-010-9238-y
- Sabetta F. (2013). Seismic hazard and design earthquakes for the central archaeological area of Rome. Bulletin of Earthquake Engineering. DOI: 10.1007/s10518-013-9427-6
- Sabetta F., Ferlito R., Lo Presti T., Martini M.G., Picone M. (2014). New methodology for loss simulation scenarios validated with recent Italian earthquakes. 32° Convegno Nazionale GNGTS, Bologna november 2014, Vol. 2 pp. 65-70
- Barteletti R., Fiorentino G., Nuti C., Sabetta F., et al. 6 authors (2016). Behavior of the Leaning Tower of Pisa: Insights on Seismic Input and Soil-Structure Interaction. DOI: 10.4028/www.scientific.net/AMM.847.454
- Sabetta F., De Fré D., Edwards J., Goemans C. (2016) Peer Review Turkey 2015.
   Programme for peer reviews in the framework of EU cooperation on civil protection and disaster risk management. Report of European Union Civil Protection-70pp.
- Fiorentino G., Forte A., Pagano E., Sabetta F., Baggio C., Lavorato C., Nuti C., Santini S. (2017). Damage patterns in the town of Amatrice after August 24th 2016 Central Italy earthquakes. *Bulletin of Earthquake Engineering*. DOI: 10.1007/s10518-017-0254-z.