



PETER SUHADOLC

UNIVERSITA' DEGLI STUDI DI TRIESTE
DIPARTIMENTO DI SCIENZE DELLA TERRA
VIA E. WEISS 1, 34127 TRIESTE, ITALY
FAX: +39-40-5582111- TEL.: +39-40-5582122
E-mail: suhadolc@units.it

Academic history

- 1950 Born on January 20, in Trieste, Italy.
- 1974 Doctor in Physics at the University of Trieste.
- 1974-1976 Teaching assistant, Research assistant, MSc at the University of Illinois, Urbana-Champaign, USA
- 1977-1978 CNR fellowship at Osservatorio Geofisico Sperimentale, Trieste.
- 1979-1980 Professor of Geophysics at the "Scuola di perfezionamento in fisica", University of Trieste.
- 1980-1983 Visiting researcher in Geophysics, Scuola Internazionale Superiore di Studi Avanzati, Trieste.
- 1984-1986 Assistant professor at the University of Trieste.
- 1987-1991 Assistant professor (tenure) at the University of Trieste.
- 1991 Royal Society visiting scientist at the Department of Earth Sciences, Oxford, UK
- 1992-1995 Professor of Geophysics at the University of Trieste.
- 1995-pres Professor of Geophysics (tenure) at the University of Trieste.

Honours

- 1974-1976 Fulbright fellow
- 1986-1998 Member of the European Union of Geosciences
- 1986-2000 Member of the European Geophysical Society
- 1990-pres Member of the American Geophysical Union
- 1991-pres Member of the Seismological Society of America
- 1992-pres Member of the Royal Astronomical Society of London

Appointments

- 1990-1991 UNIDO consultant at the International Institute for Earth and Environmental Sciences of ICS, Miramare
- 1991-1992 Member of the Integrated Senate of the University of Trieste.
- 1994-1997 Member of the Editorial Board of "Bollettino di Geofisica Teorica ed Applicata"
- 1995-2000 Evaluator of project proposals for the EU Environment Programme and the INCO-Copernicus Programme.
- 1995 Member of the ICISA Commission for the Evaluation of the safety of the Krsko (Slovenia) NPP.
- 1998 UNESCO consultant at the General Establishment of Geology and Mineral Resources (GEGMR) - Syrian National Seismological Network (SNSN), Damascus, Syria.
- 1999 Evaluator for the Portuguese government of "Istituto de Meteorologia", Lisbon.
- 2001 UNESCO consultant at the Libyan Center for Remote sensing and Space Science, Tripoli, Libya
- 1992-2002 Secretary-General of the European Seismological Commission (ESC).
- 1992-pres Member of the Editorial Board of "Tectonophysics".
- 1997-2003 Member of the Editorial Board of "Journal of Seismology"
- 1997-2003 Director of the Department of Earth Sciences, University of Trieste.
- 1998- 2002 Member of the Scientific Council of the "Istituto di Ricerca sulla Tettonica Recente" (CNR), Rome.
- 2000- 2003 Scientific responsible of the Friuli (Italy) Accelerographic Network.
- 2001-2003 Assistant secretary of the International Association of Seismology and Physics of the Earth's Interior (IASPEI).
- 2002- pres Member of the Editorial Board of "Journal of Earthquake Engineering"
- 2003-pres Deputy Director of the Department of Earth Sciences, University of Trieste
- 2003-pres Secretary-General of the "International Association of Seismology and Physics of the Earth's Interior (IASPEI)".
- 2007-pres Member of the Scientific Advisory Board of the Istituto Nazionale di Geofisica e Vulcanologia. Rome

PETER SUHADOLC

Selected publications

- Suhadolc, P., 1978. Total durations and local magnitudes for small shocks in Friuli, Italy. *Boll. Geof. Teor. Appl.* 20, 303-312.
- Suhadolc, P., Panza, G. F., 1985. Some applications of seismogram synthesis using the summation of modes of Rayleigh waves. *J. Geophys.* **58**, 183-188.
- Suhadolc, P., Chiaruttini, C., 1987. A theoretical study of the dependence of the peak ground acceleration on source and structure parameters. In: M. O. Erdik and M. O. Toksoz (eds.), *Strong Ground Motion Seismology*, Reidel, Dordrecht, 143-183.
- Panza, G. F., Suhadolc, P., 1987. Complete strong motion synthetics. In: B. A. Bolt (ed.) *Seismic Strong Motion Synthetics, Computational Techniques 4*, Academic Press, Orlando, 153-204.
- Suhadolc, P., Michelini, A., Riggio, A., 1987. Bursts of aftershocks in Friuli, Italy. *Boll. Geof. Teor. Appl.* **29**, 65-74.
- Suhadolc, P. and Panza, G.F., 1988. The European-African collision and its effects on the lithosphere-asthenosphere system. In: F.-C. Wezel (ed.), *The Origin and Evolution of Arcs, Tectonophysics*, **146**, 59-66.
- Suhadolc, P., 1989. Seismic source studies from waveform modeling of strong motion data. In: R. Cassinis, G. Nolet and G. F. Panza (eds.), *Digital Seismology and Fine Modeling of the Lithosphere*, Plenum Press, New York, 117-138.
- Suhadolc, P., Panza, G.F., Mueller, St., 1990. Physical properties of the lithosphere-asthenosphere system in Europe. In: R. Freeman and St. Mueller (eds.), *The European Geotraverse, Part 6, Tectonophysics* 176, 123-135.
- Vaccari, F., Suhadolc, P. and Panza, G.F., 1990. Irpinia, Italy, 1980 earthquake: waveform modeling of strong motion data. *Geophys. J. Int.*, 101, 631-647.
- Florsh, N., Fäh, D., Suhadolc, P. and Panza, G. F., 1991. Complete synthetic seismograms for high-frequency multimode SH waves. In: A. Udias and E. Buforn (eds.), *El Escorial workshop proceedings, Pageoph* **136**, 529-560.
- Panza, G.F., Craglietto, A. and Suhadolc, P., 1991. Source geometry of historical events retrieved by synthetic isoseismals. In: M. Stucchi and D. Postpischl (eds.), *Multidisciplinary Evaluation of Historical Seismicity, Tectonophysics*, **192**, 173-184.

- Mao, W.J. and Suhadolc, P., 1992. Simultaneous inversion of velocity structures and hypocentral locations: application to the Friuli seismic area NE Italy. *Pure and Applied Geophys.*, 138, 267-285.
- Costa, G., Panza, G.F. Suhadolc, P. and Vaccari, F., 1993. Zoning of the Italian territory in terms of expected peak ground acceleration derived from complete synthetic seismograms. In: R. Cassinis, K. Helbig and G.F.Panza (Eds.), *Geophysical Exploration in Areas of Complex Geology*, II. *J. Appl. Geophys.*, 30, 149-160.
- Fäh, D., Iodice, C., Suhadolc, P. and Panza, G. F., 1993. A new method for the realistic estimation of seismic ground motion in megacities: the case of Rome. *Earthquake Spectra*, Vol. 9, No. 4, 643-668.
- Fäh, D., Suhadolc, P., 1994. Application of numerical wave-propagation techniques to study local soil effects: The case of Benevento (Italy). *Pure and Applied Geophys.*, 143, 513-536.
- Fäh, D., Suhadolc, P., Mueller, St., and Panza, G. F., 1994. A hybrid method for the estimation of ground motion in sedimentary basins: quantitative modelling for Mexico City. *Bull. Seism. Soc. Am.*, 84 (2), 383-399.
- Mao, W.J., Panza, G.F. and Suhadolc, P., 1994. Linearized waveform inversion of local and near-regional events for source mechanism and rupturing processes. *Geophys. J. Int.*, 116, 784-798.
- Suhadolc P., Fäh D., Vaccari F. e Panza G.F., 1995. Un contributo alla microzonazione di Roma. In: "Terremoti in Italia: previsione e prevenzione dei danni", *Atti dei Convegni Lincei* 122, 203-210.
- Das, S. and Suhadolc, P., 1996. On the inverse problem for earthquake rupture. The Haskell-type source model. *J. Geophys. Res.*, 101, 5725-5738.
- Das, S., Suhadolc, P. and Kostrov, B. V., 1996. Realistic inversions to obtain gross properties of the earthquake faulting process. In: C.-I. Trifu (ed.), *Seismic Source Parameters: from Microearthquakes to Large Events*. *Tectonophysics*, 261, 165-177.
- Marrara, F. and Suhadolc, P., 1998. Site amplifications in the city of Benevento (Italy): comparison of observed and estimated ground motion from explosive sources. *J. Seism.*, 2, 125-143.
- Sarao', A., Das, S., Suhadolc, P., 1998. A comprehensive study of the effect of non-uniform station distribution on the inversion for seismic moment release history for a Haskell-type rupture model. *J. Seism.*, 2, 1-25.

- Michelini, A., Zivcic, M. and Suhadolc, P., 1998. Simultaneous inversion for velocity structure and hypocenters in Slovenia. *J. Seism.*, 2, 257-265.
- Triantafyllidis, P., Hatzidimitriou, P., Suhadolc, P., Theodulidis, N., and Pitilakis, K., 1998. Comparison between 1-D and 2-D site effects modeling in Thessaloniki . In: *The Effects of Surface Geology on Seismic Motion*, K. Irikura, K. Kudo, H. Okada and T. Satasani (eds.), Balkema, Rotterdam, Vol. 2, 981-986.
- Suhadolc, P. and Marrara, F., 1999. 2-D modeling of site response for microzonation purposes. In: *F. Wenzel, D. Lungu and O. Novak (eds.), Vrancea Earthquakes: Tectonics, Hazard and Risk Mitigation*, Kluwer, 123-136.
- Triantafyllidis, P. A., Hatzidimitriou, P. M., Theodulidis, N. P., Suhadolc, P., Papazachos, C. B., Lontzetidis, K., Raptakis, K., 1999. Site effects in the city of Thessaloniki (Greece) estimated from acceleration data and 1D local soil profiles. *Bull. Seism. Soc. Am.*, 89, 2, 521-537.
- Orozova, I. M. and Suhadolc, P., 1999. A deterministic-probabilistic approach for seismic hazard assessment. *Tectonophysics*, 312, 191-202.
- Aoudia, A., Vaccari, F., Suhadolc, P., Meghraoui, M., 2000. Seismogenic Potential and Earthquake Hazard Assessment in the Tell Atlas of Algeria. *J. Seismology*, 4, 1, 79-98.
- Zivcic, M., Vaccari, F., Suhadolc, P., 2000. Seismic zoning of Slovenia based on deterministic hazard computations. *Pageoph*, 157, 1/2, 171-184.
- Aoudia, A., Sarao', A., Bukchin, B. and Suhadolc, P., 2000. The Friuli 1976 event: a reappraisal 23 years later. *Geophys. Res. Lett.*, 27, 4, 573-576.
- Bajc, J., Aoudia, A., Sarao', A., and Suhadolc, P., 2001. The 1998 Bovec-Krn mountain (Slovenia) earthquake sequence. *Geophys. Res. Lett.* Vol. 28 , No. 9 , p. 1839-1842.
- Triantafyllidis, P., Suhadolc P. and Hatzidimitriou, D., 2002. Influence of source on 2-D site effects. *Geophys. Res. Lett.*, 29, 6, 13, 1-4.
- Ambraseys, N.N., Smit, P., Douglas, J., Margaris, B., Sigbjornsson, R., Olafsson, S., Suhadolc, P. and Costa, G., 2004. Internet Site for European Strong-Motion Data. *Boll. Geof. Teor. Appl.*, 45, n. 3, 113-129.
- Douglas, J., Suhadolc, P. and Costa, G., 2004. On the incorporation of the effect of crustal structure into empirical strong ground motion estimation. *Bull. Earthq. Eng.*, 2, 75-99.

- Suhadolc, P., Sandron, D., Fitzko, F. and Costa, G., 2004. Seismic ground motion estimates for the M 6.1 earthquake of July 26, 1963 at Skopje, Republic of Macedonia. *Acta Geophys. Geodet. Hung.*, 39(2-3), 319-326.
- Fitzko, F., Suhadolc, P. & Costa, G., 2004. Realistic strong ground motion scenarios for seismic hazard assessment studies at the Alps-Dinarides junction. In: *Earthquake: Hazard, Risk, and Strong Ground Motion*, Y.T.Chen, G.F.Panza and Z.L.Wu (eds.), Seismological Press, Beijing, 361-377.
- Fitzko, F., Suhadolc, P., Aoudia, A. and Panza, G.F., 2005. Constraints on the location and mechanism of the 1511 Western-Slovenia earthquake from active tectonics and modeling of macroseismic data. *Tectonophysics*, 404, 77-90.
- Suhadolc, P., Moratto, L., Costa, G. and Triantafyllidis, P., 2006. Source modelling of the Kozani and Arnea 1995 events with strong motion estimates for the city of Thessaloniki. *J. Earthquake Eng.*, 11, 4, 560-581.
- Fitzko, F., Costa, G., Delise A. and Suhadolc, P. 2007. Site Effects Analyses in the Old City Centre of Trieste (NE Italy) Using Accelerometric Data. *Journal of Earthquake Engineering*, 11, 1, 33-48.
- Moratto, L., Suhadolc, P., Costa, G., Orlecka-Sikora, B., Papaioannou, Ch. and Papazachos, C. B., 2007. A deterministic seismic hazard analysis for shallow earthquakes in Greece. *Tectonophysics*, 442, 66-82.

Research interests

Seismology and Engineering seismology, in particular:
Seismicity and earthquake source processes;
Seismic hazard studies with deterministic-probabilistic approaches;
Waveform inversion for source parameters;
Strong ground motion acquisition, estimates and site effects.

Teaching

Course in Solid Earth Geophysics for undergraduate students
Course in Applied Seismology for graduate students