

**Programme of the 7th International Workshop on Statistical Seismology
25 - 27 May 2011, Greece - Thera (Santorini)**

List of Poster presentations can be found at the end of the programme of Oral presentations

	Tuesday, 24 May 2011: Arrivals
	DAY 1 - Wednesday, 25 May 2011
Opening	Registration: 08:00 – 09:40 Poster display (all sessions): 08:00 – 09:40 Welcome: 09:40 – 09:45
Session 1	Wednesday, 25 May 2011 Basic Concepts in Statistical Seismology
	Session 1.1: Oral (invited) presentations, 09:45 – 11:00 Chair: I. Main, D. Schorlemmer
09:45-10:15 J.H. Dieterich J. Gilchrist, H. Colella, K. Richards-Dinger	Space-time characteristics of earthquakes and slow slip events in fault system simulations
10:15-10:45 B. E. Shaw	Surface Slip Gradients of Large Earthquakes
10:45-11:00 R. F. Zúñiga, A. Figueroa-Soto, M. Ortuño	Probabilistic estimation of average recurrence time of damaging events at a crustal faulting regime site with low frequency of large events and lack of recorded seismicity
	Coffee Break: 11:00 – 11:30, Poster visits/discussion
	Session 1.2: Oral (invited) presentations, 11:30 – 13:15 Chair: I. Main, D. Schorlemmer
11:30-12:00 D. D. Jackson, J. Zechar, D. Schorlemmer	Estimating and testing maximum magnitude
12:00-12:30 A. Kijko	How Big Can a Black Swan Be? Statistical Estimation of the Upper Bound of Disaster
12:30-12:45 M. Holschneider, G. Zöller, S. Hainzl	Estimation of the Maximum Possible Magnitude in the Framework of a Doubly-Truncated Gutenberg-Richter Model
12:45-13:00 G. Zöller, M. Holschneider S. Hainzl	Bayesian estimation of the maximum expected magnitude in a finite time
13:00-13:15 W. Klein	A New Approach to Gutenberg-Richter Scaling

	Session 1.3: Poster visits/discussion during the morning and afternoon coffee breaks
	Discussion on Session 1, 13:15 – 13:30
	Chair: I. Main, D. Schorlemmer
	DAY 1 - Wednesday, 25 May 2011
	A Better Understanding of Earthquake Physics via Earthquake Statistics –
Session 2	Lessons from the Tohoku 2011 Big Earthquake
	Session 2.1: Oral (invited) presentations, 13:30 – 14:30
	Chair: J. Dietrich, J. Zhuang
13:30-14:00 I. G. Main, A. Bell, M. Naylor, M. Heap, Ph. Meredith	Scaling properties of dynamic failure and failure forecasting: from the lab to volcanoes and earthquakes
14:00-14:30 E. H. Field	Development of UCERF3 Implies that Spatiotemporal Clustering Constitutes the Strongest Evidence for Elastic Rebound?
	Lunch: 14:30 – 15.30
	Session 2.2: Oral (invited) presentations, 15:30 – 16:45
	Chair: J. Dietrich, J. Zhuang
15:30-15:45 A. Llenos, P. Segall, J. J. McGuire	Using Earthquake Rate Changes to Monitor Aseismic Slip and Dike Intrusions
15:45-16:00 D. Andrews, M. Barall	Specifying Initial Stress for Dynamic Heterogeneous Earthquake Source Models
16:00-16:15 J. Woessner, S. Wiemer	The post-seismic heterogeneous stress field – spatial extent and duration
16:15-16:30 S. Zhou, D. Kai	Discussion on ‘Did the Zippingpu Reservoir trigger the 2008 Wenchuan earthquake?’
16:30-16:45 C. E. Bachmann, S. Wiemer, B. P. Goertz-Allmann, J. Woessner, B. Mena	Why geothermal energy research needs statistical seismology
	Coffee Break: 16:45 – 17:15, Poster visits/discussion
	Session 2.3: Oral (invited) presentations on the Tohoku 2011 Big Earthquake, 17:15 – 19:15
	Chair: J. Dietrich, J. Zhuang
17:15-17:45 S. Wiemer, B. Enescu J. Woessner	The 2011 Tohoku earthquake as a test case for statistical seismology

17:45-18:15 Y. Ogata	Anomalous seismic activities before and after the M9 Tohoku-oki Earthquake
18:15-18:30 G. A. Papadopoulos, G. Minadakis, B. Di Fiore	Was the big 2011 Tohoku earthquake preceded by a foreshock activity?
18:30-18:45 T. Iwata	The estimation of a slip distribution of the 2011 off the Pacific coast of Tohoku earthquake (Mw=9.0) based on the spatial distribution of its aftershocks and rate- and state friction law
18:45-19:15 H. Castaños, C. Lomnitz	The Boolean Matrix: Assessing the Fukushima Disaster
	Session 2.4: Poster visits/discussion during the morning and afternoon coffee breaks
	Discussion on Session 2, 19:15 – 19:30 Chair: J. Dietrich, J. Zhuang
Social Programme	21:00 Workshop Dinner in local restaurant

Session 3	DAY 2 - Thursday, 26 May 2011 Statistics of Aftershocks and Other Earthquake Sequences
	Session 3.1: Oral (invited) presentations, 08:30 – 10:45 Chair: Y. Ogata, S. Wiemer
08:30-09:00 S. Steacy, A. Christophersen, M. Gerstenberger, S. Hainzl	Developing a hybrid Coulomb/statistical model for the estimation of aftershock probabilities
09:00-09:15 C. Bach, S. Hainzl	Aftershock modeling combining statistical and physical models
09:15-09:30 J. Gilchrist, J. H. Dieterich, K. B. Richards-Dinger	Investigation of Large Event Clusters and Aftershock Statistics in Simulated Catalogs
09:30-09:45 M. Naylor, J. Greenhough, S. Touati, I. Main, A. Bell	Interpretation of statistical signals in earthquake data
09:45-10:15 J. Zhuang, D. Vere- Jones, Y. Ogata, W. Marzocchi	Foreshock phenomena and the Båth law implied by generic earthquake clustering
10:15-10:45 S. Hainzl, T. Fischer	Insights in fluid-driven earthquake generation from analysis of repeating swarm activity
	Session 3.2: Poster visits/discussion during the morning and afternoon coffee breaks
	Discussion on Session 3, 10:45 – 11:00 Chair: D. Jackson, S. Wiemer
	Coffee Break: 11:00 – 11:30, Poster visits/discussion
Session 4	DAY 2 - Thursday, 26 May 2011 Prospective and Retrospective Testing of Earthquake Forecasts & Hazard/Risk Assessment
	Session 4.1: Oral (invited) presentations, 11:30 – 13:30 Chair: T. Jordan, S. Steacy
11:30-12:00 Y. Y. Kagan	Full Earth high-resolution earthquake forecasts and their testing (Leon Knopoff Lecture)
12:00-12:30 D.L. Turcotte, Y.-T. Ling, J.R. Holliday, M.K. Sachs, J.B. Rundle, C.-C. Chen, K.F. Tiampo	Issues associated with statistical tests of prospective earthquake forecasts
12:30-13:00 G. A. Papadopoulos, B. Di Fiore	Foreshocks and short-term hazard evaluation: A Global Review

13:00-13:30 E. Lippiello, C. Godano, L. de Arcangelis	Mainshock magnitude inferred from the spatial organization of foreshocks
	Lunch: 13:30 – 15:00
	Session 4.2: Oral (invited) presentations, 15:00 –16:40 Chair: T. Jordan, S. Steacy
15:00-15:20 R. Rotondi	Occurrence probability given by a renewal process: its use in forecasting, retrospective validation, and as support to fault segmentation
15:20-15:40 R. Console, G.Falcone M. Murru, E. Papadimitriou, V. Karakostas, D. Rhoades, T.Parsons	Renewal modeling and co-seismic stress transfer for seismic hazard assessment in the Corinth Gulf, Greece, fault system
15:40-16:00 D. Karlis, K. Orfanogiannaki	Multivariate Hidden Markov models for earthquake counts
16:00-16:20 Th. Tsapanos	The Markov-Chains as a tool for very large earthquake occurrence in south America
16:20-16:40 D. Eberhard, J. Zechar S. Wiemer	A prospective earthquake forecast experiment in the western Pacific
	Session 4.3: Poster visits/discussion during the morning and afternoon coffee breaks
	Session 4 Discussion, 16:40 – 17:00 Chair: T. Jordan, S. Steacy
	Coffee Break: 17:00 – 18:00, Poster visits/discussion
Session 5	DAY 2 - Thursday, 26 May 2011 Initiatives-Future Activities 18:00- 19:00 Chair: N. Hirata, G.A. Papadopoulos
18:00 – 18:30 J. Zechar, J. L. Hardebeck, A. J. Michael, M. Naylor, S. Steacy, S. Wiemer, J. Zhuang	CORSSA: Community Online Resource for Statistical Seismicity Analysis - Status & Outlook - Discussion
18:30 – 19:00 Programming Committee	Business meeting: Special Issue of “Research in Geophysics”– EOS Publication – StatSei8 - Others
Social Programme	20:00 Dinner in the Conference Center

Session 6	DAY 3 - Friday, 27 May 2011
	Global Earthquake Predictability Research
	Session 6.1: Oral (invited) presentations, 08:30-12:00 Chair: D. Jackson, K. Tiampo
08:30-09:00 T. Jordan	Operational Earthquake Forecasting: State of Knowledge and Guidelines for Implementation
09:00-09:30 N. Hirata, H. Tsuruoka K. Z. Nanjo	CSEP Testing Centre and the first results of the earthquake forecast testing experiment in Japan
09:30-09:40 S. Wiemer	CSEP contributions from EU Research Projects
09:40-09:45 G. A. Papadopoulos	Contributions from other relevant EU Research Projects
09:45-10:15 P. Shebalin, C. Narteau, M. Holschneider	From alarm to rate-based earthquake forecast model EAST (Early Aftershock Statistics)
10:15-10:45 J. R. Rubinstein, N. M. Beeler, K. H. Che, W. Ellsworth, B. Kilgore, D. Lockner H. Savage, N. Uchida	Time- and Slip-Predictability Cannot be Dependably Used to Predict the Behavior of Repeating Earthquakes and Laboratory Earthquakes
10:45-11:00 D. Schorlemmer, M. C. Gerstenberger, N. Hirata, D. D. Jackson C. Jiang, T. H. Jordan, W. Marzocchi, K. Z. Nanjo, G. A. Papadopoulos, D. A. Rhoades, S. Wiemer, Z. Wu, J. D. Zechar and the CSEP Working Group	CSEP Overview
11:00-12:00 Plenary	CSEP and RELM future activities: open discussion
	Workshop closing, Poster removal
	Lunch: 12:00 – 13.15
Social Programme	Caldera boat trip including volcano visit, & dinner onboard: 15.30 – 20.30

Poster Programme:

All Posters should be placed on the boards in the morning of the first day of the Workshop (Wednesday, 25 May 2011) from 08:00 to 09:40 am and to be removed in the last day (Friday, 27 May 2011) before lunch. Poster visits and discussions are scheduled during the morning and afternoon coffee breaks of 25 and 26 May.

	Session 1 Posters
Jackson David	Proposed test for fault segmentation
G. Zöller, S. Hainzl, G.B. Brietzke, L. Wang & M. Holschneider	A stochastic fault-based earthquake simulator for short-and long-term seismicity
A. Hamed and M. R. Gheitanchi	Correction of noise ratio in spectral analysis method by Forward Deconvolution
A. Hamed and M. R. Gheitanchi	Determination of Rg phase by means of Hilbert –Huang transform
N. Van der Elst and E.E. Brodsky	The hunt for the global triggering cascade
S.N. Hashemi, L. Etemadjahromi and N. Nowroozi	A geostatistical analysis of seismic energy release in Iran
V.S. Seleznev, A.F. Emanov, V.M. Soloviev, A.S. Salnikov, V.N. Kashun, A.V. Liseikin, S.A. Elagin, A.E. Shenmaier, I.E. Romanenko	Active seismology using high-power vibration sources
T. Tormann, S. Wiemer and E. Hauksson	Artifacts in earthquake catalogs – illustrated by an up-to-date example of southern California
S. Hiemer, Q. Wang, D.D. Jackson, Y.Y. Kagan, S. Wiemer, J.D. Zechar and J. Woessner	Stochastic Earthquake Source Model: Satisfying Accepted Laws
E. Varini and R. Rotondi	Global statistical tests for clustered pattern discovery in Italy
C. Godano, L. De Arcangelis, M. Bottiglieri and E. Lippiello	How large will be the next earthquake? A dynamical scaling approach to seismic occurrence
E. Kogger and V. Schlindwein	The 1999 earthquake swarm at Gakkel Ridge, Arctic Ocean: A Spatiotemporal Analysis
D. Eberhard and S. Wiemer	MapSeis: A Matlab based toolbox for seismicity analysis

Q. Wang, H.-T. Wang and L.L. Tang	Research on characteristics of Multi-parameter comprehensive anomaly based on Earthquake corresponding relevancy spectrum analysis
Session 2 Posters	
K. F. Tiampo, W. Klein R. Dominguez, N. Cho, A. Jiménez, J.B. Rundle	The statistics of seismicity rate variations and stress changes
S. Gentili	Radiated energy evolution during seismic sequences
T. Goebel, T. Becker, C. Sammis, G. Dresen and D. Schorlemmer	Variations in b-values, Size and Rate of Micro-Seismicity before Dynamic Slip Instabilities in Laboratory Experiments
B. Orlecka-Sikora	Mining induced seismicity changes due to event-event triggering
Y. Kagan	Random stress and Omori's law
I. Votsi, N. Limnios, G. Tsaklidis and E. Papadimitriou	Non-parametric hidden semi-Markov models for revealing the actual stress field underlying the earthquake generation
A.C. Aiken, Z. Peng, D. Shelly and D. Hill	Comprehensive analysis of triggered tremor around the Parkfield-Cholame section of the San Andreas Fault
K. Leptokarpoulos, E.E. Papadimitriou, B. Orlecka-Sikora and V.G. Karakostas	Stress interactions among active fault zones of the Aegean Sea and their impact on seismicity rate changes and time-dependent seismic hazard
E. Lippiello, M. Pica Ciamarra, C. Godano and L. de Arcangelis	Unjamming Dynamics: The Micromechanics of a Seismic Fault Model
A.F. Emanov, A.A. Emanov, E.V. Leskova and A.F. Fateyev	Trigger effects in development of induced seismicity
A.C. Aiken, Z. Peng and Ch. Wu	Dynamic Triggering of Microearthquakes at Three Geothermal Regions in California
P. Urban and S. Lasocki	Ψ -Phenomenon in Mining-induced Seismicity
M. Avlonitis & G.A. Papadopoulos	On the role of b-values to earthquake forecasting: bridging macroscopic observations to source mechanical considerations
Session 3 Posters	
R. Shcherbakov, P. Bhattacharya, K. Tiampo and L. Mansinha	Anomalous Statistics of Aftershock Sequences Generated by Supershear Ruptures
A. Adamaki, E.E. Papadimitriou, G.M. Tsaklidis and V. G. Karakostas	Contribution to the study of aftershock rate changes: Modeling Poisson point processes

S. Touati, M. Naylor and I. Main	Masking of aftershock triggering patterns in earthquake catalogues by temporal overlapping of sequences
M.-A. Meier, M.J. Werner, J. Woessner and S. Wiemer	Earthquake Triggering via Static Stress Transfer: The Role of Small Aftershocks
D.K. Gospodinov	Benioff Energy Release (BER) stochastic model for a single aftershock sequence
A.F. Emanov, E.V. Leskova, A.F. Emanov and A.F. Fateyev A.F.	Aftershock process of Chu earthquake
	Session 4 Posters
Y. Ogata	Prospective foreshock forecasting experiment during the last 17 years
T. Kumazawa and Y. Ogata	Smoothing for the nonstationarity with ETAS clustering
B. Pace and F. Visini	Insights on earthquake forecasting key-parameters using a simple earthquake simulator
T. Tormann, S. Wiemer and J. Hardebeck	The value of microseismicity analysis for probabilistic seismic hazard assessment
D. De Gaetano, J. McCloskey and S. Nalbant	The systematic study of the stability of forecasts in the rate- and state-dependent model.
Y. Panayotopoulos, N. Hirata, H. Tsuruoka, S. Sakai, S. Nakagawa, K. Kasahara, T. Aketagawa, H. Kimura	How Do Waves Attenuate Under Urban Areas? – Towards real time estimation of maximum amplitude on the Tokyo Metropolitan Seismic Observation Network (MeSO-net).
A. Bala, M. Radulian, B. Grecu, E. Popescu	Source Effects vs. Site Effects of Vrancea Earthquakes recorded in Bucharest City, Romania.
A. González	Forecasting the distance to the next earthquake
Ch. Kontoes, Th. Herekakis, I. Keramitzoglou, A. Fokaefs, G. A. Papadopoulos, C. Kiranoudis, C. Karakostas, V. Lekidis, A. Kappos, G. Panagopoulos, D. Aifantopoulou, S. Paralikidis, A. M. Deflorio, D. Iasillo	The EU Project MASSIVE: Mapping Seismic Vulnerability and Expected Risk of Cities

	Session 6 Posters
D. Schorlemmer, J. D. Zechar, M. Werner, M. C. Gerstenberger, D. A. Rhoades, and the RELM and CSEP Working Groups	Results from the Regional Earthquake Likelihood Models Experiment
S. Yokoi, H. Tsuruoka, N. Hirata, D. Schorlemmer, F. Eucher, M. Liulis, K. Z. Nanjo and T.H. Jordan	Report on prospective evaluation of the 1-day, 3-month and 1-year classes earthquake forecasts in Japan
C. Smyth, J. Mori, M. Yamada	Earthquake forecast enrichment scores
D. Schorlemmer	Probabilistic Seismic Network Completeness Studies Around the World
R. Clements, F.P. Schoenberg and D. Schorlemmer	Residual Analysis of Space-time Point Processes with Applications to Earthquake Forecast Models in California
G.A. Papadopoulos, B. Di Fiore and G. Minadakis	Towards CSEP Tests in Greece: Completeness of the Greek national catalogue
B. Di Fiore, S. Pilidou, G. Diakogianni and G. A. Papadopoulos	Completeness Analysis of a Catalogue Produced by a Small Number of Stations: the Case of Cyprus
P. Shebalin	Rapid Long-Range Activation of Seismicity Prior To The Largest Earthquakes of Japan and Kuril Islands