

## Program of the ESD 2010

Smolenice Castle, Slovak Republic, June 27 – July 1, 2010

Day	am	pm	Evening
<b>Monday June 28</b>	<p><b>07:20 - 08:15</b> <b>Breakfast</b></p> <p><b>08:20 - 08:30</b> <b>Welcoming and opening speech</b></p> <p><b>08:30 - 10:30</b> <b><u>Oral Session O1</u></b> <b>Convenor - J. Kristek</b></p> <p><b>08:30 - 09:00</b> <b>W. L. Ellsworth</b> Constraints on earthquake dynamics from observations in the near-source region at the San Andreas Fault Observatory at Depth</p> <p><b>09:00 - 09:30</b> <b>A. S. Baltay, G. A. Prieto, S. Ide, G. C. Beroza</b> Energetic and enervated earthquakes: real scatter in apparent stress and implications for ground motion prediction</p> <p><b>09:30 - 10:00</b> <b>M. Bouchon, H. Karabulut, J. Schmittbuhl</b> What controls the location where rupture nucleates in large earthquakes? Some insights from the 1999 Turkish earthquakes</p> <p><b>10:00 - 10:30</b> <b>P. M. Mai, M. Page, D. Schorlemmer</b> Source inversion validation: quantifying uncertainties in earthquake source inversions</p> <p><b>10:30 - 11:00</b> <b>Coffee Break</b></p> <p><b>11:00 - 12:30</b> <b><u>Poster Session P1 – all groups</u></b></p>	<p><b>12:45 - 01:45</b> <b>Lunch</b></p> <p><b>02:00 - 04:00</b> <b><u>Oral Session O2</u></b> <b>Convenor – N. Lapusta</b></p> <p><b>02:00 - 02:30</b> <b>G. Shao, C. Ji</b> What did we learn from the SPICE earthquake source inversion blindtest I?</p> <p><b>02:30 - 03:00</b> <b>K. Asano, T. Iwata</b> A kinematic slip inversion method including unknown source fault geometry by strong motion data</p> <p><b>03:00 - 03:30</b> <b>E. Fukuyama, K. X. Hao</b> Kinematics of the double-layered dipping fault rupture during the 2008 Wenchuan earthquake</p> <p><b>03:30 - 04:00</b> <b>T. E. Yano, G. Shao, Q. Liu, C. Ji, R. J. Archuleta</b> Co- and post-seismic kinematic model for the April 6, 2009 Mw 6.3 L'Aquila earthquake by inversion of the strong motion, GPS, and INSAR data</p> <p><b>04:00 - 04:30</b> <b>Coffee Break</b></p> <p><b>04:30 - 06:00</b> <b><u>Poster Session P2 – group A</u></b></p>	<p><b>06:30 - 07:15</b> <b>Concert</b></p> <p><b>07:15 - 10:30</b> <b>Workshop Dinner</b></p>

Day	am	pm	Evening
<p><b>Tuesday</b> <b>June 29</b></p>	<p><b>07:20 - 08:20</b> <b>Breakfast</b></p> <p><b>08:30 - 10:30</b> <b><u>Oral Session O3</u></b> <b>Convenor - R. Harris</b></p> <p><b>08:30 - 09:00</b> <b>J.-P. Ampuero</b> A hierarchy of tremor migration patterns explained by the interaction between brittle asperities mediated by creep transients</p> <p><b>09:00 - 09:30</b> <b>Y. Kaneko, J.-P. Avouac, N. Lapusta</b> Towards inferring earthquake patterns from geodetic observations of interseismic coupling</p> <p><b>09:30 - 10:00</b> <b>B. E. Shaw</b> Slip at the surface and at depth in large earthquakes</p> <p><b>10:00 - 10:30</b> <b>N. Lapusta, H. Noda</b> Reproducing source characteristics of the 1999 Chi-Chi earthquake in a model with laboratory-based fault properties</p> <p><b>10:30 - 11:00</b> <b>Coffee Break</b></p>		

Day	am	pm	Evening
<p><b>Tuesday June 29</b></p>	<p><b>11:00 - 13:00</b>  <u>Oral Session O4</u>  Convenor - E. Fukuyama</p> <p><b>11:00 - 11:30</b>  <b>E. M. Dunham, J. E. Kozdon, D. Belanger, L. Cong</b>  High frequency ground motion from spontaneous ruptures on rough faults</p> <p><b>11:30 - 12:00</b>  <b>Y. Urata, K. Kuge, Y. Kase</b>  Spontaneous dynamic rupture propagation beyond fault discontinuities: effect of thermal pressurization</p> <p><b>12:00 - 12:30</b>  <b>B. Aagaard</b>  Constraining the depth dependence of fault constitutive parameters in spontaneous rupture models</p> <p><b>12:30 - 13:00</b>  <b>H. Noda, N. Lapusta</b>  3D simulations of long-term fault slip with dynamic weakening: relation between locked patches and earthquake-induced stress changes</p>	<p><b>01:15 - 02:15</b>  <b>Lunch</b></p> <p><b>02:15 - 07:00</b>  <u>Free Time</u></p> <p><b>Hiking</b>  <b>Soccer Match</b>  <b>Trip to a Historic Site</b></p>	<p><b>07:00 - 08:00</b>  <b>Dinner</b></p> <p><b>08:00- 10:00</b>  <u>Poster Session P3</u>  <u>- group B</u>  wine and beer will be served</p>

Day	am	pm	Evening
<p data-bbox="174 794 347 858"><b>Wednesday June 30</b></p>	<p data-bbox="369 228 555 288"><b>07:20 - 08:20</b> <b>Breakfast</b></p> <p data-bbox="369 328 672 424"><b>08:30 - 10:30</b> <b><u>Oral Session O5</u></b> <b>Convenor – P. M. Mai</b></p> <p data-bbox="427 464 1048 632"><b>08:30 - 09:00</b> <b>A.-A. Gabriel, J.-P. Ampuero, P. M. Mai, L. A. Dalguer</b> Self-similar behavior of pulse-like dynamic ruptures in elastic and plastic media</p> <p data-bbox="427 635 1037 762"><b>09:00 - 09:30</b> <b>L. A. Dalguer, J.-P. Ampuero</b> Numerical modeling of earthquake rupture in large aspect-ratio faults</p> <p data-bbox="427 767 972 895"><b>09:30 - 10:00</b> <b>J. C. Lozos, D. D. Oglesby, J. N. Brune</b> The effects of fault stepovers on ground motion</p> <p data-bbox="427 900 999 1027"><b>10:00 - 10:30</b> <b>V. M. Cruz-Atienza, K. B. Olsen</b> Supershear mach-waves expose the fault breakdown slip</p> <p data-bbox="369 1070 560 1134"><b>10:30 - 11:00</b> <b>Coffee Break</b></p> <p data-bbox="369 1174 779 1238"><b>11:00 - 12:30</b> <b><u>Poster Session P4 – group C</u></b></p>	<p data-bbox="1084 228 1270 288"><b>01:00 - 02:00</b> <b>Lunch</b></p> <p data-bbox="1084 328 1462 424"><b>02:30 – 04:00</b> <b><u>Oral Session O6</u></b> <b>Convenor – J.-P. Ampuero</b></p> <p data-bbox="1142 464 1780 592"><b>02:30 - 03:00</b> <b>R. A. Harris</b> Spontaneous rupture modeling of earthquakes - testing the methods</p> <p data-bbox="1142 596 1756 756"><b>03:00 - 03:30</b> <b>D. D. Oglesby, N. Lapusta, V. Gabuchian, A. J. Rosakis</b> Laboratory and numerical models of thrust faults</p> <p data-bbox="1142 761 1785 968"><b>03:30 - 04:00</b> <b>S. Latour, M. Campillo, C. Voisin, P. Favreau, J. Schmedes, D. Lavallée</b> Construction of an effective friction law equivalent to small scale fault heterogeneity by studying initiation of dynamic ruptures</p> <p data-bbox="1084 1005 1276 1069"><b>04:00 - 04:30</b> <b>Coffee Break</b></p>	

Day	am	pm	Evening
<p><b>Wednesday June 30</b></p>		<p><b>04:30 – 06:00</b>  <b><u>Oral Session O7</u></b>  <b>Convenor – B. Aagaard</b></p> <p><b>04:30 - 05:00</b>  <b>P. Moczo, M. Galis, M. Kristekova, J. Kristek</b>  The TSN modeling of rupture propagation with two slip-dependent friction laws</p> <p><b>05:00 - 05:30</b>  <b>S. G. Song</b>  Earthquake source statistics inferred from earthquake source physics</p> <p><b>05:30 - 06:00</b>  <b>D. Roten, S. M. Day, K. B. Olsen</b>  Revealing source and path sensitivities of basin guided waves by time-reversed simulations</p> <p><b>06:00 - 06:10</b>  <b>R. J. Archuleta</b>  Concluding speech</p>	<p><b>07:00 - 10:00</b>  <b>Garden Party</b></p>

## Posters – Group A

A1	Lucia FOJTÍKOVÁ, Václav VAVRYČUK <b>FOCAL MECHANISMS OF MICRO-EARTHQUAKES IN SEISMOACTIVE AREA IN THE MALÉ KARPATY MTS., SLOVAKIA</b>
A2	Tomotaka IWATA, Kimiyuki ASANO <b>VALIDATION OF CHARACTERIZED SOURCE MODEL OF INTRASLAB EARTHQUAKES FOR STRONG MOTION PREDICTION</b>
A3	Deborah L. KANE, Peter M. SHEARER, Bettina P. ALLMANN, Frank L. VERNON <b>SYNTHETIC SOURCE SPECTRUM MODELING OF RUPTURE DIRECTIVITY WITH APPLICATION TO M &lt; 5 PARKFIELD EARTHQUAKES</b>
A4	Lingsen MENG, Jean-Paul AMPUERO <b>DESIGNING A NETWORK OF SEISMIC ANTENNAS FOR SOURCE IMAGING</b>
A5	Jean-Paul AMPUERO, Remi MICHEL, Surendra N. SOMALA, Nadia LAPUSTA, Jean-Philippe AVOUAC <b>TOWARDS EARTHQUAKE SOURCE IMAGING BY A SPACE-BASED STRONG MOTION SEISMOMETER</b>
A6	Lingsen MENG, Jean-Paul AMPUERO, Herbert RENDON <b>SOURCE PROPERTIES OF THE JANUARY 2010 M7 HAITI EARTHQUAKE ESTIMATED BY BACK PROJECTION OF WAVES RECORDED BY THE NATIONAL SEISMIC NETWORK OF VENEZUELA AND THE USARRAY</b>
A7	Takahiko UCHIDE, Satoshi IDE <b>SCALING OF EARTHQUAKE RUPTURE GROWTH IN THE PARKFIELD AREA: SELF-SIMILAR GROWTH AND SUPPRESSION BY THE FINITE SEISMOGENIC LAYER</b>
A8	Bruce E. SHAW <b>SLIP AT THE SURFACE AND AT DEPTH IN LARGE EARTHQUAKES</b>
A9	Soumaya LATOUR, Thomas GALLOT, Stéfan CATHELINE, Christophe VOISIN, Éric LAROSE, François RENARD, Adeline RICHARD, Benjamin VIAL, Michel CAMPILLO <b>OBSERVATION OF SLIPPING SURFACE AND EMITTED WAVES DURING SLIPPING EVENTS IN HYDROGELS FRICTION EXPERIMENTS</b>
A10	Dimitri ZIGONE, Christophe VOISIN, Éric LAROSE, François RENARD, Michel CAMPILLO <b>SLIP ACCELERATION GENERATES SEISMIC TREMOR LIKE SIGNALS IN FRICTION EXPERIMENTS</b>
A11	Tetsuo YAMAGUCHI, Masatoshi MORISHITA, Takane HORI, Hide SAKAGUCHI, Jean-Paul AMPUERO, Masao DOI <b>COMPLEX BEHAVIOR AND SCALING RELATIONS IN SLIDING FRICTION OF POLYMER GELS</b>
A12	Vincent ROSSETTO, Éric LAROSE, Nicolas TREMBLAY, Thomas PLANÈS, Ludovic MARGERIN <b>LOCATING A SMALL CHANGE IN A MULTIPLE SCATTERING ENVIRONMENT</b>

## Posters – Group B

B1	Gilbert B. BRIETZKE, Sebastian HAINZL, Gert ZÖLLER, Matthias HOLSCHNEIDER <b>TOWARDS A VIRTUAL LOWER RHINE EMBAYMENT</b>
B2	Sylvain BARBOT, Nadia LAPUSTA, Jean-Philippe AVOUAC <b>SIMULATIONS OF SLIP HISTORY ON FAULTS WITH HETEROGENEOUS RATE-WEAKENING AND RATE-STRENGTHENING PROPERTIES</b>
B3	Cyrill Fabrice Didier BAUMANN, Luis A. DALGUER <b>STRESS HETEROGENEITY IN A DYNAMIC RUPTURE PROPAGATION WITH STRONG VELOCITY WEAKENING FRICTION</b>
B4	Ylona van DINTHER, Taras GERYA, Luis A. DALGUER, P. Martin MAI, Gabriele MORRA <b>NUMERICAL INVESTIGATION OF THE LONG-TERM SEISMIC CYCLE IN GEODYNAMIC SIMULATIONS OF A SUBDUCTION ZONE</b>
B5	Hiroyuki GOTO, Leonardo RAMÍREZ-GUZMÁN, Jacobo BIELAK <b>SIMULATION OF SPONTANEOUS RUPTURE BASED ON A COMBINED BOUNDARY INTEGRAL EQUATION METHOD AND FINITE ELEMENT METHOD APPROACH</b>
B6	Shiro HIRANO, Teruo YAMASHITA <b>THEORETICAL ANALYSIS OF STATIC MODE-II CRACK IN A TWO-LAYERED MEDIUM – INTERFACIAL FAULT AND INTERSECTING FAULT</b>
B7	Yihe HUANG, Jean-Paul AMPUERO, Luis A. DALGUER <b>PROPERTIES OF DYNAMIC SLIP PULSES IN A 2D SLAB</b>
B8	Nizar MOUSSATAT <b>A COMPARATIVE STUDY FOR NUMERICAL RUPTURE SIMULATION WITH WAVE PROPAGATION COUPLING</b>
B9	Kenny J. RYAN, David D. OGLESBY <b>DYNAMIC MODELS OF FAULT STEPOVERS WITH RATE-STATE FRICTION</b>
B10	Shiqing XU, Yehuda BEN-ZION, Jean-Paul AMPUERO <b>OFF-FAULT YIELDING DURING DYNAMIC RUPTURES: DISTRIBUTION AND ORIENTATION</b>

## Posters – Group C

C1	Ethan T. COON, Bruce E. SHAW, Marc SPIEGELMAN <b>EXTENDED FINITE ELEMENT METHODS FOR RUPTURE SIMULATION ON NONPLANAR FAULT SYSTEMS</b>
C2	Percy GALVEZ, Tarje NISSEN-MEYER, Jean Paul AMPUERO, Luis A. DALGUER <b>3D RUPTURE DYNAMICS WITH UNSTRUCTURED SPECTRAL ELEMENTS AND A FLUX-BASED FAULT SOLVER</b>
C3	Christian PELTIES, Josep de la PUENTE, Jean-Paul AMPUERO, Martin KÄSER <b>DYNAMIC RUPTURE MODELING ON UNSTRUCTURED MESHES USING A DISCONTINUOUS GALERKIN METHOD</b>
C4	Hiroyuki GOTO, Jacobo BIELAK <b>HYBRID MULTIDOMAIN FINITE ELEMENT AND BOUNDARY ELEMENT METHOD FOR DYNAMIC RUPTURE IN HETEROGENEOUS MEDIA</b>
C5	Jeremy E. KOZDON, Eric M. DUNHAM, Jan NORDSTROM <b>ACCURATE AND STABLE TREATMENT OF NONLINEAR FAULT BOUNDARY CONDITIONS WITH HIGHER-ORDER FINITE DIFFERENCE METHODS</b>
C6	Hiroe MIYAKE, Yuko KASE, Shin AOI, Kazuki KOKETSU, Takeshi KIMURA, Kaoru KAWAJI, Yasushi IKEGAMI, Shinichi AKIYAMA <b>VALIDATION AND APPLICATION OF FEM AND FDM SIMULATION CODES FOR DYNAMIC EARTHQUAKE RUPTURE</b>
C7	Surendra Nadh SOMALA, Brad AAGAARD, Jean-Paul AMPUERO, Nadia LAPUSTA <b>BENCHMARKING PYLITH FOR 2-D AND 3-D DYNAMIC SPONTANEOUS RUPTURE MODELING</b>