

# CURRICULUM VITÆ OF SUSANA CUSTÓDIO

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## Academic Appointments

Assistant Researcher	Centro de Geofísica, Universidade de Coimbra, Portugal	2008 – present
Visiting Researcher	Institute for Crustal Studies, University of California at Santa Barbara, USA	2008

## Awards, Honors and Fellowships

Marie Curie Grant Recipient, FP7 People International Reintegration Grant	2009 – 2013
Graduate Award for Research Excellence, Dept. of Earth Science, UCSB	2007
Outstanding Student Paper Award, AGU Fall Meeting	2006
Student Presentation Award, SSA Annual Meeting	2006
Graduate Award for Geophysics, Department of Earth Science, UCSB	2005
PhD Scholarship from FCT (SFRH/BD/14353/2003)	2003 – 2007
Young Scientist Research Award – Physics and Environment, Calouste Gulbenkian Foundation, Lisbon	2002

## Professional Memberships

American Geophysical Union	2004 – present
Seismological Society of America	2004 – present

# 1 Education

PhD	Geological Sciences University of California at Santa Barbara, USA GPA: 4.0/4.0 Thesis title: Earthquake rupture and ground motion: The 2004 $M_W$ 6.0 Parkfield earthquake. Committee: Prof. Ralph J. Archuleta, Prof. Toshiro Tanimoto, Prof. Chen Ji and Dr. Jamison Steidl	Sep. 2003 – Dec. 2007
Licenciatura	Physics Engineering Instituto Superior Técnico, Lisbon, Portugal Final Average: 17/20 Thesis title: Diurnal and semi-diurnal modulation of seismic noise in Fogo island, Cape Verde. Supervisor: Prof. João F. B. D. Fonseca Thesis grade: 19/20	Sep. 1997 – Jul. 2002
Erasmus	Physics and Geophysics University of Copenhagen, Denmark Supervisor: Prof. Stig Steenstrup	Sep. 2000 – Jun. 2001

# 2 Research

## 2.1 Research Experience

Assistant Researcher CGUC, Portugal 2008 – present	Seismic instrumentation, real-time seismology, earthquake source, geophysical inverse problems, moment tensor inversion, historical seismology, resolution of geophysical inverse problems.
Visiting Researcher UCSB, USA 2008	Co-seismic finite-fault inversions, resolution of geophysical inverse problems combination of GPS and seismic data.
Graduate Researcher UCSB, USA 2003 – 2007	Earthquake source kinematics and dynamics, finite-fault inversions, uncertainty in geophysical inverse problems, site effects, seismic hazard. Supervisor: Prof. Ralph J. Archuleta
Visiting Trainee USGS, USA 2003	Volcano seismology, harmonic tremor, tidal modulation. Supervisor: Dr. Bernard Chouet
Trainee IST, Portugal 2001 – 2003	Volcano seismology. Supervisor: Prof. João F. B. D. Fonseca

## 2.2 Scientific Projects

1. Team Member 36 months (2012 – 2014)  
*INSPIRE – Estudo Instrumental dos Terramotos Portugueses: 1900-1960*  
Funded by FCT, PTDC/CTE-GIX/122262/2010.  
PI: Josep O. Batlló, UL.
2. Team Member 36 months (2012 – 2014)  
*AQUAREL - Quantificação de Sismos e da Estrutura Interna Terrestre à Escala Regional: Aplicação à Península Ibérica Ocidental*  
Funded by FCT, PTDC/CTE-GIX/116819/2010.  
PI: Ana M. G. Ferreira, UEA/IST.
3. Team Member 36 months (2010 – 2013)  
*SCENE: Site Condition Evaluation for National Seismic Hazard Estimation*  
Funded by FCT, PTDC/CTE-GIX/103032/2008.  
PI: Susana P. Vilanova, IST.
4. Team Member 36 months (2010 – 2013)  
*WILAS: West Iberia Lithosphere and Asthenosphere Structure*  
Funded by FCT, PTDC/CTE-GIX/097946/2008.  
PI: Nuno A. Dias, UL.
5. Informal Collaborator 36 months (2010 – 2013)  
*MOZART: Mozambique African Rift Tomography*  
Funded by FCT, PTDC/CTE-GIX/103249/2008.  
PI: João F. B. D. Fonseca, IST.
6. Informal Collaborator 40 months (2010 – 2014)  
*História da Ciência na Universidade de Coimbra (1547-1933)*  
Funded by FCT, HC/0119/2009.  
PI: Carlos M. B. Fiolhais, UC.
7. Principal Investigator 48 months (2009 – 2013)  
*ART-SEIS: Automated Real-Time Broadband Seismology in the Azores-Gibraltar Region*  
Funded by FP7, PIRG03-GA-2008-230922.  
Supervisor: José M. Azevedo, UC.
8. Informal Collaborator 48 months (2008 – 2012)  
*MIA-VITA: Mitigate and Assess Risk from Volcanic Impact on Terrain and Human Activities*  
Funded by FP7, collaborative projects.  
PI: Pierre Thierry, BRGM.
9. Research Assistant 36 months (2005 – 2008)  
*Resolution, Robustness and Dynamics Based on Inversions of Seismic and Geodetic Data of the 2004 Parkfield Earthquake*  
Funded by NSF, EAR-0512000.  
PI: Ralph J. Archuleta, UCSB.

10. Research Assistant 24 months (2005 – 2007)  
*Inversion of Seismic and Geodetic Data from the 2004 Parkfield Earthquake*  
 Funded by SCEC.  
 PI: Ralph J. Archuleta, UCSB.
11. Trainee (Bolsheiro de Iniciação Científica) 18 months (2002 – 2003)  
*TagusNet: Instrumental Study of the Active Faulting in the Lower Tagus Valley.*  
 Funded by FCT, POCTI CTA/32720/2000.  
 PI: Prof. João F. B. D. Fonseca.

## 2.3 Research Supervision

1. Sara J. F. S. R. Carvalho, MSc. Research trainee (Bolsheiro de Investigação), December 2011 – present, UC. Project ART-SEIS: Real-time seismology, shakemaps, broadband waveform seismology, history of seismology, seismic instrumentation.
2. Vânia C. V. A. Lima, MSc. Research trainee (Bolsheiro de Investigação), December 2011 – present, UC. Project ART-SEIS: Real-time seismology, moment tensor inversion, broadband waveform seismology, history of seismology, seismic instrumentation.
3. Fábio Antunes, BSc student. Research trainee (Bolsheiro de Integração na Investigação), March 2011 – September 2011, UC. Project SeismoArchives: History of seismology, education of seismology.
4. João M. F. Narciso, BSc/MSc. Research trainee (Bolsheiro de Iniciação Científica and Bolsheiro de Investigação), April 2009 – March 2010, UC. Project ART-SEIS: Real-time seismology, history of seismology, seismic instrumentation.
5. Ana L. N. A. S. Domingues, BSc/MSc. Research trainee (Bolsheiro de Iniciação Científica and Bolsheiro de Investigação), April 2009 – September 2011, IST. Project ART-SEIS: Moment tensor inversion, real-time seismology, seismic instrumentation.
6. Johanna Vasquez, high school student. Research trainee, summer 2006, UCSB. Summer mentorship program: Seismic hazard analysis.

## 3 Teaching

### 3.1 Teaching Experience

Teaching Assistant	Thermodynamics	UCSB	Fall 2006
Teaching Assistant	Natural Disasters	UCSB	Winter 2005
Teaching Assistant	Seismology	UCSB	Winter 2004

### 3.2 Academic Supervision

1. Ana L. N. A. S. Domingues, PhD in Physics Engineering/Geophysics/Seismology, IST/UEA, *Tomographic study of the East African Rift in Mozambique*. Co-supervision with Prof. João Fonseca (IST) and Prof. Ana Ferreira (UEA). PhD in progress.

2. Carlos J. B. Antunes, PhD in Geology, UC, *O ensino da sismologia no ensino básico e secundário. Um estudo de avaliação*. Assistance to supervision, main supervision by Prof. Celeste Gomes (UC) and Prof. Fernando Lopes (UC). PhD in preparatory phase.
3. Ana L. N. A. S. Domingues, MSc in Physics Engineering, IST, *Kinematic Waveform Inversion – Study of Regional Earthquakes in Southwest Iberia*. Co-supervision with Prof. João Fonseca (IST). MSc thesis concluded with a grade of 19/20, November 2010.

## 4 Publications

### 4.1 Publications in Peer-Reviewed Journals

Total of 117 citations according to ISI Web of Knowledge.

1. Custódio, S., J. Battló, D. Martins, F. Antunes, J. Narciso, S. Carvalho, V. Lima, F. Lopes, P. Ribeiro, R. Sleeman, E. I. Alves and C. R. Gomes (submitted). Station COI: Undusting an Old Seismic Station. *Seismological Research Letters*.
2. Twardzik, C., R. Madariaga, S. Das and S. Custódio (submitted). Kinematic inversion of the Mw 6.0 28th September 2004 Parkeld, California, earthquake based on elliptical sub-fault approximation. *Geophysics Journal International*.
3. Zahradník, J. and S. Custódio (accepted in January 2012, in press), Moment tensor resolvability: Application to southwest Iberia. *Bulletin of the Seismological Society of America*.
4. Custódio, S., S. Cesca and S. Heimann (in press, to be published in February 2012). Fast kinematic waveform inversion and robustness analysis: Application to the 2007 Mw 5.9 Horseshoe Abyssal Plain earthquake offshore southwest Iberia. *Bulletin of the Seismological Society of America*, 102 (1), doi:10.1785/0120110125.
5. Custódio, S., M. T. Page, and R. J. Archuleta (2009). Constraining earthquake source inversions with GPS data 2: A two-step approach to combine seismic and geodetic datasets. *Journal of Geophysical Research*, 114, B01315, doi:10.1029/2008JB005746.
6. Page, M. T., S. Custódio, R. J. Archuleta, and J. M. Carlson (2009). Constraining earthquake source inversions with GPS data 1: Resolution based removal of artifacts. *Journal of Geophysical Research*, 114, B01314, doi:10.1029/2007JB005449.
7. Ma, S., S. Custódio, R. J. Archuleta, and P. Liu (2008). Dynamic modeling of the 2004  $M_w$ 6.0 Parkfield, California, earthquake. *Journal of Geophysical Research*, 113, B02301, doi:10.1029/2007JB005216.
8. Custódio, S., and R. J. Archuleta, (2007). Parkfield earthquakes: Characteristic or complementary? *Journal of Geophysical Research*, 112, B05310, doi:10.1029/2006JB004617.
9. Liu, P., S. Custódio, and R. J. Archuleta (2006). Kinematic inversion of the 2004  $M_w$ 6.0 Parkfield earthquake including an approximation to site effects. *Bulletin of the Seismological Society of America*, vol. 96, no. 4B, pp. S143-S158, doi:10.1785/0120050826.

10. Custódio, S., P. Liu, and R. J. Archuleta (2005). The 2004  $M_w$ 6.0 Parkfield, California, earthquake: Inversion of near-source ground motion using multiple data sets. *Geophysical Research Letters*, vol. 32, L23312, doi:10.1029/2005GL024417.
11. Custódio, S., J. F. B. D. Fonseca, N. F. d’Oreye, B. V. E. Faria, and Z. Bandomo (2003). Tidal modulation of seismic noise and volcanic tremor. *Geophysical Research Letters*, vol. 30 (15), doi: 10.1029/2003GL016991 .

In preparation (to be submitted in the next couple months):

1. Domingues, A., S. Custódio and S. Cesca (in preparation), Waveform study of small to moderate earthquakes in southwest Iberia.

## 4.2 Book Reviews

1. “Earthquakes and Tsunamis in the Past – A Guide to Techniques in Historical Seismology”, by Emanuela Guidoboni and John E. Ebel, Cambridge University Press, 2009; in: *Pure Appl. Geophys.* 167 (2010): 1453–1454.
2. “The 1755 Lisbon Earthquake: Revisited”, eds. Luiz A. Mendes-Victor, Carlos Sousa Oliveira, João Azevedo, and António Ribeiro, Geotechnical, Geological and Earthquake Engineering Series, vol. 7, Springer, 2009; in: *Pure Appl. Geophys.* 167 (2010): 359–361.
3. “Introduction to Planetary Sciences: The Geological perspective”, by G. Faure and T.M.Mensing, Springer, 2007; in: *Pure Appl. Geophys.* 166 (2009): 2111–2113.
4. “Fundamentals of Physical Volcanology”, by Elisabeth A. Parfitt and Lionel Wilson, Blackwell Publishing, 2008; in: *Pure Appl. Geophys.* 165 (2008): 1968–1969.

## 4.3 Invited Talks

1. Custódio, S. (2010). Earthquake Source Models: What Can They Tell Us? DEGGE, Faculdade de Ciências da Universidade de Lisboa, Lisboa, Portugal.
2. Custódio, S., R. J. Archuleta, P. Liu, and M. T. Page (2009). On the Nature of Parkfield Characteritic Earthquakes. CGE, Universidade de Évora, Évora, Portugal.
3. Custódio, S., R. J. Archuleta, P. Liu, M. T. Page, and S. Ma (2008). Earthquake Rupture and Ground-Motion: The 2004 Mw6 Parkfield, California, Earthquake. ICIST, Instituto Superior Técnico, Lisbon, Portugal.
4. Custódio, S., M. T. Page, P. Liu, and R. J. Archuleta (2008). A Two-Step Approach for Combining GPS and Seismic Data in Kinematic Inversions. Harvard University, Cambridge, MA, USA.
5. Custódio, S., P. Liu, S. Ma, M. T. Page, and R. J. Archuleta (2008). Earthquake Source Physics: Using Ground-Motion to Image Earthquake Ruptures. CNSI Scientific Computing Series, University of California, Santa Barbara, CA, USA.
6. Custódio, S., M. T. Page, P. Liu, and R. J. Archuleta (2008). A Two-Step Approach for Combining GPS and Seismic Data in Kinematic Inversions. Earthquake Physics Seminar, University of Southern California, Los Angeles, CA, USA.

7. Custódio, S., M. T. Page, and R. J. Archuleta (2007). Integrating GPS and Seismic Data in Earthquake Source Inversions. *EOS Trans. AGU*, 88(52), *Fall Meet. Suppl.*, Abstract G23A-01. Fall Meeting of the American Geophysical Union, San Francisco, CA, USA.

#### 4.4 Conference Presentations

1. Custódio, S. and J. Zahradník (2011). Moment Tensor Resolvability: Application to Southwest Iberia. *AGU Fall Meeting*, Abstract S12B-03.
2. Domingues, A. L., S. Custódio and S. Cesca (2011). Kinematic Waveform Inversion: Application to Southwest Iberia Seismicity. *AGU Fall Meeting*, Abstract T43E-2403.
3. Twardzik, C., R. Madariaga, S. Das, S. Custódio and R. Archuleta (2011). Kinematic Inversion of the Mw 6.0 2004 Parkfield, California, Earthquake Using Elliptical Sub-Fault Approximation. *AGU Fall Meeting*, Abstract S52B-02.
4. Custódio, S., F. Antunes, J. Batlló, F. C. Lopes, P. Ribeiro, D. Martins and C. Gomes (2011). Conservation of the Seismological Heritage of the Geophysical Institute of the University of Coimbra. *Congresso Luso-Brasileiro de História da Ciência*, Coimbra, Portugal, October 26 – 29, 2011.
5. Leonardo, A. J. F., S. Custódio, J. Batlló, D. Martins and C. Fiolhais (2011). O Instituto, a Sismologia em Coimbra e o Intercâmbio Luso-Espanhol. *Congresso Luso-Brasileiro de História da Ciência*, Coimbra, Portugal, October 26 – 29, 2011.
6. Ribeiro, P., D. Martins, J. Batlló, J. Narciso, S. Custódio, F. C. Lopes and C. Gomes (2011). Jacinto de Sousa e a Criação do Observatório Meteorológico e Magnético da Universidade de Coimbra. *Congresso Luso-Brasileiro de História da Ciência*, Coimbra, Portugal, October 26 – 29, 2011.
7. Antunes, C., A. Gonçalves, S. Custódio, F. Lopes and C. Gomes (2011). A Estação Sísmica do Instituto Geofísico da Universidade de Coimbra e o seu Contributo para o Ensino da Sismologia. *XI Congresso da Sociedade Portuguesa de Ciências da Educação*, Guarda, Portugal, June 30 – July 2, 2011.
8. Custódio, S., and J. Zahradník (2011). Can OBS Help Constrain Moment Tensor Inversions? *Orfeus Observatory Coordination Meeting*, Lisbon, Portugal, May 25–28, 2011.
9. Domingues, A., S. Custódio, and S. Cesca (2011). Kinematic Waveform Inversion: Application to SW Iberia Seismicity. *Orfeus Observatory Coordination Meeting*, Lisbon, Portugal, May 25–28, 2011.
10. Dias, N. A., F. Carrilho, C. Haberland, J. Fonseca, M. Bezzeghoud, S. Custódio, A. Villaseñor, C. Neves, R. Fernandes, and the WILAS Team (2011). Closing the Seismic Coverage on Western Iberia: Project WILAS. *Geophysical Research Abstracts*, Vol. 13, *EGU2011-3807*, 2011, EGU General Assembly 2011, Vienna, Austria, 2011.
11. Custódio, S., and S. Cesca (2011). The Kiwi Tools: Kinematic Inversion of a Regional Earthquake and Robustness Analysis. *7º Simpósio da Associação Portuguesa de Meteorologia e Geofísica*, Setúbal, Portugal, March 28–30, 2011.
12. Domingues, A., S. Custódio, and S. Cesca (2011). Application of the Kiwi Tools to Regional Earthquakes in Southwest Iberia. *7º Simpósio da Associação Portuguesa de Meteorologia e Geofísica*, Setúbal, Portugal, March 28–30, 2011.

13. Dias, N. A., F. Carrilho, C. Haberland, J. Fonseca, S. Custódio, B. Caldeira, A. Villaseñor, and the WILAS team (2011). Project WILAS: West Iberia Lithosphere and Asthenosphere Structure. *7º Simpósio da Associação Portuguesa de Meteorologia e Geofísica*, Setúbal, Portugal, March 28–30, 2011.
14. Antunes, F., J. Narciso, F. C. Lopes, S. Custódio, J. Batlló, D. Martins, P. Ribeiro, and C. R. Gomes (2011). Outreach and Education at the Geophysical Institute of the University of Coimbra. *7º Simpósio da Associação Portuguesa de Meteorologia e Geofísica*, Setúbal, Portugal, March 28–30, 2011.
15. Batlló, J., S. Custódio, J. Narciso, P. Ribeiro, F. Lopes, D. Martins, and C. Gomes (2010). The Collection of Historical Instruments of the Geophysics Institute of the Coimbra University: Its Importance for Present Research and Science Education. *XXIX Scientific Instrument Symposium*, Florence, Italy, October 4–9, 2010.
16. Custódio, S., and S. Cesca (2010). Historical Seismographs and Application of the Kiwi Tools: Kinematic Study of the 2007 Mw 5.9 Horseshoe Abyssal Plain, SW Iberia, Earthquake. *32nd General Assembly of the European Seismological Commission*, Montpellier, France, September 6–10, 2010 (Abstract book, pp. 107).
17. Custódio, S., S. Cesca, A. Domingues, and NEAREST/WP3 Working Group (2010). Moment Tensor Inversion of Regional Earthquakes Using the Kiwi Tools: Results for SW Iberia and Adjacent Offshore. *32nd General Assembly of the European Seismological Commission*, Montpellier, France, September 6–10, 2010 (Abstract book, pp. 92).
18. Custódio, S., J. Narciso, J. Batlló, F. Lopes, D. Martins, P. Ribeiro, and C. Gomes (2010). Historical Seismographs and Seismograms at the Geophysical Institute of the University of Coimbra. Its importance for present research. *32nd General Assembly of the European Seismological Commission*, Montpellier, France, September 6–10, 2010 (Abstract book, pp. 52).
19. Dias, N., C. Corela, P. Alves, H. Ferreira, F. Carrilho, C. Haberland, S. Custódio, J. Fonseca, B. Caldeira, and A. Villaseor (2010). Project WILAS West Iberia Lithosphere and Asthenosphere Structure: completing the coverage on Western Iberia. *32nd General Assembly of the European Seismological Commission*, Montpellier, France, September 6–10, 2010 (Abstract book, pp. 167).
20. Narciso, J., S. Custódio, J. Batlló, F. C. Lopes, D. R. Martins, C. R. Gomes, and P. Ribeiro (2010). Historical Seismology at the Geophysical Institute of the University of Coimbra. *VIII Congresso Nacional de Geologia*, Braga, Portugal, July 9–16, 2010 (e-Terra, Vol. 15, nr 5).
21. Page, M., S. Custódio, R. Archuleta, J. Carlson, M. Mai, and D. Schorlemmer (2010). Quantifying Uncertainty in Earthquake Source Inversions. *3rd USGS Modeling Conference*, Broomfield, Colorado, June 7–11, 2010.
22. Custódio, S., S. Cesca, and A. Domingues (2010). Moment Tensor Inversion Using the Kiwi Tools: Application to Regional Seismicity in Portugal. *Geophysical Research Abstracts, Vol. 12, EGU2010-0, 2010*, EGU General Assembly 2010, Vienna, Austria, May 2–7, 2010.
23. Domingues A., S. Cesca, S. Custódio, J. Fonseca, and A. Rimi (2010). Application of the Kiwi tools in southwest Iberia. *Rencontre Internationale sur les aléas séismiques – Sismo 2010*, Agadir, Morocco, February 26–28, 2010.

24. Domingues, A., S. Cesca, and S. Custódio (2009). Application of the Kiwi tools in southwest Iberia. *Workshop on Point and Kinematic Source Inversion Using the KIWI Tools*, University of Hamburg, Germany, November 19–20, 2009.
25. Narciso, J., H. Ferreira, B. Faria, S. Custódio, Y. Omar, S. Heleno, J. Fonseca, and S. Day (2009). Terra Viva - A network of seismometers in schools of Fogo Island, Cape Verde. *Disaster Risk Reduction for Natural Hazards: Putting Research into Practice*, University College London, United Kingdom, November 4–6, 2009.
26. Custódio, S., and R. Archuleta (2009). Parkfield Earthquakes: “Characteristic” or Complementary? *UNESCO-RELEMR Workshop on Seismicity and Earthquake Engineering in the Extended Mediterranean*, Lisbon, Portugal, October 26–29, 2009.
27. Custódio, S., and Y. Omar (2009). SiW – MIA-VITA Project: Network of Schools for Monitoring the Volcano in Fogo Island, Cape Verde, 2009-2010. *International Seminar on Volcanic Risk Mitigation*, Fogo Island, Cape Verde, June 20–25, 2009.
28. Custódio, S., J. Batlló, J. Narciso, F. C. Lopes, C. R. Gomes, D. R. Martins, P. Ribeiro (2009). Seismic Instrumentation at the Geophysical Institute of the University of Coimbra. *International Conference on Geological Collections and Museums*, Coimbra, Portugal, June 5–6, 2009.
29. Custódio, S., J. Batlló, J. Narciso, F. C. Lopes, C. R. Gomes, D. R. Martins, P. Ribeiro (2009). Historical Seismograms at the Geophysical Institute of the University of Coimbra. *International Conference on Geological Collections and Museums*, Coimbra, Portugal, June 5–6, 2009.
30. Batlló, J., S. Custódio, D. R. Martins, C. R. Gomes, F. C. Lopes, J. Narciso, and P. Ribeiro (2009). Historical Magnetograms of the Geophysical Institute of the University of Coimbra and New Possibilities to Use Them. *International Conference on Geological Collections and Museums*, Coimbra, Portugal, June 5–6, 2009.
31. Custódio, S., A. Domingues, and J. Narciso (2009). ART-SEIS: A Project for Real-Time Seismology in Portugal. *31<sup>st</sup> Course of the International School of Geophysics – International Workshop on Real Time Seismology: Rapid Characterization of the Earthquake Source and of its Effects*, Erice, Italy, May 2–8, 2009.
32. Custódio, S. and R. J. Archuleta (2009). Parkfield Earthquakes: Characteristic or Complementary? *2<sup>nd</sup> International Seminar on Prediction of Earthquakes*, Lisbon, Portugal, Apr. 29–30, 2009.
33. Custódio, S., J. Schmedes, and R. J. Archuleta (2009). Investigation of Ground Acceleration During the 2004 M6.0 Parkfield, California, Earthquake Based on Isochrones. *Seismological Research Letters*, vol. 80(2), pp 354.
34. Custódio, S., and J. F. B. D. Fonseca (2009). Broadband Seismic Study of Western Iberia and Offshore Atlantic. *Seismological Research Letters*, vol. 80(2), pp 322.
35. Custódio, S., M. T. Page, and R. J. Archuleta (2009). Combining Different Datasets in Earthquake Source Inversions. *6<sup>o</sup> Simpósio da Associação Portuguesa de Meteorologia e Geofísica*, Caparica, Portugal, Mar. 16–19, 2009.
36. Custódio, S., M. T. Page, and R. J. Archuleta (2007). A New Approach for Combining GPS and Seismic Data in Kinematic Inversions. *EOS Trans. AGU, 88(52), Fall Meet. Suppl., Abstract S53C-05*.

37. Page, M. T., S. Custódio, R. J. Archuleta, and J. M. Carlson, (2007). Using Resolution Information to Remove Artifacts from GPS Inversions. *EOS Trans. AGU, 88(52), Fall Meet. Suppl., Abstract S51B-0499*.
38. Archuleta, R. J., P. Liu, S. Custódio, and M. T. Page (2007). Improving on Inversions for Kinematic Parameters of the Earthquake Source. *EOS Trans. AGU, 88(52), Fall Meet. Suppl., Abstract S53C-02*.
39. Custódio, S., M. T. Page, K. Larson, and R. J. Archuleta (2007). Combining Different Datasets to Obtain a Rupture Model: The 2004 M6.0 Parkfield, California, Earthquake. *Seismological Research Letters*, vol. 78(2), pp 302.
40. Page, M. T., S. Custódio, R. J. Archuleta, and J. M. Carlson (2007). Resolution of GPS Data from the 2004 Mw6.0 Parkfield Earthquake. *Seismological Research Letters*, vol. 78(2), pp 289.
41. Custódio, S., and R. J. Archuleta (2006). b-Values as a Proxy for Stress – Inferences for Dynamic Modeling of the 2004 Parkfield Earthquake. *EOS Trans. AGU, 87(52), Fall Meet. Suppl., Abstract S23C-0167*.
42. Archuleta, R. J., S. Custódio, and S. Ma (2006). Effect of Realistic 3D-Velocity Structure on Rupture Dynamics and Ground- Motion. *EOS Trans. AGU, 87(52), Fall Meet. Suppl., Abstract S53D-05*.
43. Page, M. T., S. Custódio, R. J. Archuleta, and J. M. Carlson (2006). Resolution of GPS data from the 2004 Mw6.0 Parkfield Earthquake. *EOS Trans. AGU, 87(52), Fall Meet. Suppl., Abstract NS31C-1582*.
44. Ma, S., R. J. Archuleta, S. Custódio, and P. Liu (2006). Dynamic Modeling of the 2004 Mw 6.0 Parkfield Earthquake. *EOS Trans. AGU, 87(52), Fall Meet. Suppl., Abstract S32A-03*.
45. Custódio, S., S. Ma, and R. J. Archuleta (2006). Modeling Earthquake Dynamic Ruptures in Realistic 3D Heterogeneous Material – Preliminary Results. *Annual Meeting of the Southern California Earthquake Center*, Palm Springs, California, Sep. 10-13, 2006.
46. Page, M., S. Custódio, R. J. Archuleta, and J. M. Carlson (2006). Resolution of GPS data from the 2004 Mw6.0 Parkfield Earthquake. *Annual Meeting of the Southern California Earthquake Center*, Palm Springs, California, Sep. 10-13, 2006.
47. Custódio, S., and R. J. Archuleta (2006). The Parkfield Section of the San Andreas Fault, California: Characteristic or Complementary Earthquake Ruptures? *International workshop on comparative studies of the North Anatolian Fault and the San Andreas Fault (Southern California)*, Istanbul, Turkey, Aug. 14-18, 2006.
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## 4.5 News and Media

Several contributes to the portuguese media through interviews to the press (Jornal I, Visão, Correio da Manhã, Diário das Beiras), radio (Antena 1 and Rádio Renascença) and to the TV of the University of Coimbra.

## 5 Other Professional Activities

### 5.1 Seismic Station Operation

- 2008 – present: Station operator of station COI, Geophysical Institute of the University of Coimbra. The station currently transmits data recorded by a broadband sensor in real-time to IM (Lisbon, Portugal), ORFEUS Data Center, and IRIS DMC. Coimbra's station is also a "Reference Station of the World" within project SeismoArchives, IASPEI, since March 2011 (<http://www.iris.edu/seismo/>).
- 2001 – 2003: Helper in deploying the broadband seismic network TagusNet, coordinated by João Fonseca, IST.

### 5.2 Conference Organization

1. 15th World Conference on Earthquake Engineering, Lisbon, Portugal, 2012. *Member of the Local Advisory Committee.*
2. VII Assembleia Luso-Espanhola de Geodesia e Geofísica, Donostia-San Sebastián, Spain, 2012. *Member of the Scientific Committee.*
3. GeoCPLP2012, Coimbra, Portugal, 2012. *Scientific Advisor.*
4. 7<sup>o</sup> Simpósio da Associação Portuguesa de Meteorologia e Geofísica, Setúbal, Portugal, March 28–30, 2011. *Member of the Scientific Committee.*

### 5.3 Referee Activities

- Since 2007: Referee for JGR, GRL and BSSA.
- 2011: Reviewer of research project proposals for the Czech Science Foundation.
- 2011: Judge for *Outstanding Student Paper Award* during the AGU Fall Meeting.

### 5.4 Outreach and Education

- Coordinator of the Club of Seismology, University of Coimbra, since 2010.
- Coordinator of regular student visits to the seismic station of the Geophysical Institute of the University of Coimbra, Universidade de Coimbra, since 2008.

- Speaker, seminar for high school teachers “Teaching Seismology: Other Perspectives”, 2012.
- Ciência em Família “À descoberta dos sismos”, Science Museum of the University of Coimbra, 2011.
- Collaborator of the V Feira/Mostra do Centro Ciência Viva de Vila do Conde, 2011.
- Collaborator of the Young Geoscientists Congress, University of Coimbra, 2009 and 2011.
- Collaborator in the deployment of a seismic station in a high school in Fogo Island, Cape Verde, in collaboration with the FP7 project MIA-VITA and the NGO Scientists in the World, 2009.
- Speaker, Science Talk Series – “Tertúlia de Cultura Científica”, Club Setubalense, 2009.
- Volunteer at the Physics Week, Instituto Superior Técnico, 1999.
- Coordinator of the Evenings of Astronomical Observations, Instituto Superior Técnico, 1998.
- Coordinator of the Physics Week, Instituto Superior Técnico, 1998.
- Volunteer at the Physics Week, Instituto Superior Técnico, 1997.

## 5.5 Academic Service

Graduate Student Representative	Earth Science Dpt., UCSB	2005 – 2006
Undergraduate Student Representative	Physics Dpt., IST	1997 – 2000
Director	Physics Student Association, IST	1998

## 6 Other Information

### 6.1 Leaves

Maternity Leave	March 2010 – December 2010
Maternity Leave	June 2007 – December 2007

### 6.2 Language Skills

Portuguese — Mother tongue.

English — Fluent.

Grade A in the *Certificate of Proficiency in English*, by the University of Cambridge.  
September 1987 – June 1997.

French — Very good knowledge.

Grade 14/20 in the *Diplôme de Langue Française*, by the Alliance Française.  
September 1991 – July 1999.

German — Elementary knowledge.

Grade *Gut* in the *Zertifikat Deutsch*, by the Goethe Institut.  
September 1997 – July 2003.

Danish — Elementary knowledge.

Attendance of two intensive courses in the Department of Nordic Philology, University of Copenhagen, Denmark.

August 2000 – June 2001.

Italian — Elementary knowledge.

Attendance of three introductory courses in the Department of French and Italian at the University of California, Santa Barbara, USA.

January 2004 – December 2004.

Spanish — Elementary knowledge.

### Acronyms:

AGU	American Geophysical Union
BRGM	Bureau de Recherches Géologiques et Minières
BSSA	Bulletin of the Seismological Society of America
CGUC	Centro de Geofísica da Universidade de Coimbra
FCT	Fundação para a Ciência e Tecnologia
FP7	Framework Programme 7, European Commission
GPA	Graduate Point Average
GRL	Geophysical Research Letters
IASPEI	International Association of Seismology and Physics of the Earth's
IM	Instituto de Meteorologia
IRIS DMC	Incorporated Research Institutions for Seismology, Data Management Center
IST	Instituto Superior Técnico
JGR	Journal of Geophysical Research
NGO	Non-Governmental Organization
NSF	National Science Foundation
ORFEUS	Observatories and Research Facilities for European Seismology
PI	Principal Investigator
SCEC	Southern California Earthquake Center
SSA	Seismological Society of America
UC	University of Coimbra
UCSB	University of California at Santa Barbara
UEA	University of East Anglia
UL	Universidade de Lisboa
USGS	United States Geological Survey