

# Alejandro Tejedor

ASSISTANT PROFESSOR

Sorbonne University Abu Dhabi

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## Research Interests

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River Deltas; Network Science; Earth-surface processes; Complex Systems; Landscape evolution; Information Theory; River Networks; Graph-Theory; Nonlinear dynamics; Self-similar networks; Fractals; Hierarchical systems; Aggregation processes; Modeling; Self-organized criticality.

## Education

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### Universidad de Zaragoza

Zaragoza, Spain

PH.D. IN PHYSICS

2011

- Area of Study: Statistical Seismicity
- Thesis Topic: *Study of Predictability of Cellular automata with application to seismicity*
- Advisers: Prof. Amalio F. Pacheco and Prof. Javier B. Gómez

### Universidad de Zaragoza

Zaragoza, Spain

M.S. IN PHYSICS AND PHYSICAL TECHNOLOGIES

2008

- Grade: 9.23/10

### Universidad de Zaragoza

Zaragoza, Spain

B.S. IN PHYSICS

2007

## Academic Appointments

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### Sorbonne University Abu Dhabi

Abu Dhabi, UAE

ASSISTANT PROFESSOR

February 2020 - present

- Department: Department of Science and Engineering
- Focus: Complex Systems, Earth surface processes

### University of California, Irvine

Irvine, USA

ASSOCIATE SPECIALIST AND LECTURER

July 2016 - present

- Department: Department of Civil and Environmental Engineering
- Supervisor: Prof. Efi Foufoula-Georgiou
- Focus: River Deltas, Landscape Evolution, Networks, Earth surface processes

### Max Planck Institute for the Physics of Complex Systems

Dresden, Germany

VISITING SCIENTIST

December 2018 - February 2020

- Group: Nonlinear Dynamics and Time Series Analysis
- Supervisor: Prof. Dr. Holger Kantz
- Focus: River Deltas, Networks, Nonlinear Dynamics, Earth surface processes

### University of Minnesota

Minneapolis, USA

POSTDOCTORAL ASSOCIATE

September 2013 - June 2016

- Department: Saint Anthony Falls Laboratory
- Supervisor: Prof. Efi Foufoula-Georgiou
- Focus: River Deltas, Landscape Evolution, River Networks

### University of Nevada, Reno

Reno, USA

POSTDOCTORAL SCHOLAR

November 2011 - August 2013

- Department: Department of Mathematics and Statistics
- Supervisor: Dr. Ilya Zaliapin
- Focus: Aggregation processes and Self-similar Networks

## Teaching Experience

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### Sorbonne University Abu Dhabi

Abu Dhabi, UAE

ASSISTANT PROFESSOR

From 2019

- PHYS 004. Intro to the Labs 1 (Foundation Year)
- PHYS 005. Intro to the Labs 2 (Foundation Year)
- PHYS 140. Mechanics-Physics 1 (Undergraduate Level)
- PHYS 140. Active Science (Undergraduate Level)
- PHYS 203. Waves (Undergraduate Level)
- PHYS 217. Experimental Physics II (Undergraduate Level)
- PHYS 314. Continuum Mechanics (Undergraduate Level)
- PHYS 313. Numerical Physics (Undergraduate Level)

### University of California, Irvine

Irvine, USA

TEACHING ASSISTANT

Winter 2018

- CEE 298. Wavelets in Hydrology and Earth Systems (Graduate Level)

### University of California, Irvine

Irvine, USA

LECTURER

Fall 2016

- ENGRCEE 283. Mathematical Methods in Engineering Analysis. (Graduate Level)

### Summer Institute on Earth-surface Dynamics (NCED)

USA

INVITED LECTURER

2015-2016

- Tulane University - July 2015
- University of Minnesota - August 2014

### UNED (National Distance Education University)

Calatayud, Spain

ADJUNCT PROFESSOR

2009-2011

- Physics I, Physics II and Experimental Physics I (Undergraduate Level)
- Mechanics I.

## Student advising

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### Ph.D.

University of California Irvine

LAWRENCE VULIS

2017-present

- Co-Advised
- Area of Study: Arctic Deltas

### Undergraduate

Sorbonne University Abu Dhabi

MARCUS ENSIG

2021

- Internship
- Area of Study: Network Robustness

## Honors and Awards

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2018	<b>Research Fellowship</b> , Max Planck Institute - Visitors program	Germany
2016	<b>Postdoctoral Fellowship</b> , Postdoctoral Synthesis Fellowship - National Center for Earth-surface Dynamics	USA
2011	<b>Summa Cum Laude</b> , Ph.D. in Physics - University of Zaragoza, Spain	Spain
2008	<b>Predocctoral Fellowship</b> , Predocctoral Fellowship - Government of Aragon, Spain	Spain

## Professional Activities and Leadership

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### CONFERENCE AND WORKSHOP ORGANIZATION

#### 12th International Precipitation Conference IPC12

Irvine, CA, USA

PROGRAM COMMITTEE

June 19 - 21, 2019

- More than 150 abstracts received

#### Data Analytics for Climate and Earth (DANCE)

Lake Arrowhead, CA, USA

CO-ORGANIZER

March 27-29, 2019

- Funded by LIFE (NSF)
- 32 participants

### SESSION ORGANIZATION

#### AGU Fall Meeting 2021

New Orleans, LO, USA

CO-ORGANIZER

December 13-17, 2021

- Session: River Deltas: Hydrology, Geomorphology, and Sedimentology

#### AGU Fall Meeting 2020

San Francisco, CA, USA (ONLINE)

CO-ORGANIZER

December 1-17, 2020

- Session: River Deltas: Hydrology, Geomorphology, and Sedimentology

## AGU Fall Meeting 2019

San Francisco, CA, USA

CO-ORGANIZER

December 9-13, 2019

- Session: River Deltas: Hydrology, Geomorphology, and Sedimentology
- Union Session: Data Analytics and Machine Learning Innovation for Climate and Earth Surface Processes

## AGU Fall Meeting 2016

San Francisco, CA, USA

CO-ORGANIZER

December 12-16, 2016

- Session: Comparing and Contrasting Geomorphic Channel Networks

## INTERNATIONAL COMMITTEES

### Devendra Lal Medal Committee

American Geophysical Union

MEMBER

2019-present

- The Devendra Lal Memorial Medal is given annually to an early- or mid-career scientist in recognition of outstanding research in Earth and/or space sciences by a scientist belonging to and working in developing country

## REFeree SERVICE

PNAS, Geophysical Research Letters, Earth's Future, Journal of Geophysical Research, IEEE Transactions on Control of Network Systems, Water Resources Research, Journal of Hydrology, Earth Surface Dynamics, SIAM Journal on Applied Mathematics, New Journal of Physics, Physical Review E, Scientific Reports, Nonlinear Processes in Geophysics, Physica A, Physica D: Nonlinear Phenomena, Physics and Chemistry of the Earth.

## Funding and Projects

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### Research Fellowship

Germany

PRINCIPAL INVESTIGATOR

2018

- Awarded by the Max Planck Society - Visitors Program
- Funds: \$110,000

### Understanding deltas through the lens of their channel networks

USA

CO-INVESTIGATOR

2018

- Awarded by the National Science Foundation - NSF EAR- 1811909
- I participated in the proposal preparation and I am an active researcher in the project
- Funds: \$300,000

### TRIPODS+X:RES: Data Science Frontiers in Climate Science

USA

CO-INVESTIGATOR

2018

- Awarded by the National Science Foundation - DMS- 1839336
- I participated in the proposal preparation and I am an active researcher in this project
- Funds: \$300,000

### Synthesis Post-doc Fellowship

USA

PRINCIPAL INVESTIGATOR

2016

- Awarded the National Center for Earth-surface Dynamics (a National-Science-Foundation Science and Technology Center)
- Funds: \$30,000

### NSF-Belmont Forum: DELTAS

International

CO-INVESTIGATOR

2013

- Awarded by the Belmont Forum
- I participated as a researcher in this project
- Funds: \$2,100,000

### Envirodynamics on River Networks

USA

CO-INVESTIGATOR

2013

- Awarded by the National Science Foundation - NSF DMS- 0934871
- I participated as a researcher in this project
- Funds: \$225,000

### Pre-Doctoral Fellowship

Spain

PRINCIPAL INVESTIGATOR

2008

- Awarded by Government of Aragon, Spain
- Funds: \$60,000

# Referred Journal Publications

## PUBLISHED

1. Roy, J., **A. Tejedor** and A. Singh. Dynamic Clusters to Infer Topologic Controls on Environmental Transport of River Networks. *Geophys. Res. Lett.*, 49, e2021GL096957 (2022).
2. Vulis, L., **A. Tejedor**, I. Zaliapin, J. Rowland, and E. Foufoula-Georgiou. Climate Signatures on Lake And Wetland Size Distributions in Arctic Deltas. *Geophys. Res. Lett.*, 48, e2021GL094437 (2021).
3. Ferdowsi, B., J.D. Gartner, K.N. Johnson, A. Kasprak, K.L. Miller, W.Nardin, A.C. Ortiz, and **A. Tejedor**. Earthcasting: Geomorphic forecasts for society. *Earth's Future*, 9, e2021EF002088 (2021).
4. Wang, X., **A. Tejedor**, Y. Wang, Y. Moreno. Unique superdiffusion induced by directionality in multiplex networks. (*New J. Phys.*) 23 013016 (2021)
5. Stevens, A., R. Willett, A. Mamalakis, E. Foufoula-Georgiou, **A. Tejedor**, J.T. Randerson, P. Smyth and S. Wright. Graph-guided regularized regression of Pacific Ocean climate variables to increase predictive skill of southwestern US winter precipitation. *J. Climat* 1–50 (2020)
6. Zamani, M., **A. Tejedor**, M. Vogl, F. Krätli, M. Valleriani, and H. Kantz. Evolution and transformation of early modern cosmological knowledge: a network study. *Scientific Report*, 10, 19822 (2020)
7. Vulis, L., **A. Tejedor**, J. Schwenk, A. Piliouras, J. Rowland, and E. Foufoula-Georgiou. Channel network control on seasonal lake area dynamics in arctic deltas. *Geophys. Res. Lett.*, 47, e2019GL086710 (2020).
8. Valleriani, M., F. Krätli, M. Zamani, **A. Tejedor**, C. Sander, M. Vogl, S. Bertram, G. Funke, H. Kantz. The emergence of epistemic communities in the 'Sphaera'corpus: mechanisms of knowledge evolution. *Journal of Historical Network Research*, 3(1), 50-91 (2019).
9. **Tejedor, A.**, A. Longjas, E. Foufoula-Georgiou, T. Georgiou, and Y. Moreno. Diffusion Dynamics and Optimal Coupling in Directed Multiplex Networks. *Phys. Rev. X* 8, 031071. 2018.
10. **Tejedor, A.**, A. Longjas, P. Passalacqua, Y. Moreno and E. Foufoula-Georgiou. River deltas as Multiplex networks: A framework for studying multi-process multi-scale connectivity via coupled-network theory. *Geophys. Res. Lett.* 45. 2018.
11. **Tejedor, A.**, A. Longjas, D. Edmonds, I. Zaliapin, T. Georgiou, A. Rinaldo and E. Foufoula-Georgiou. Entropy and Optimality in River Deltas. *PNAS* 114, 11651-11656. 2017.
12. **Tejedor, A.**, A. Singh, I. Zaliapin, A. Densmore and E. Foufoula-Georgiou. Scale-dependent erosional patterns in steady-state and transient-state landscapes. *Sci. Adv.* 3, e1701683 2017.
13. **Tejedor, A.**, A. Longjas, I. Zaliapin, S. Ambroj and E. Foufoula-Georgiou. Network robustness assessed within a dual connectivity framework. *Scientific Reports* 7, 8567. 2017.
14. Danesh-Yazdi, M., **A. Tejedor**, and E. Foufoula-Georgiou, Self-Dissimilar Landscapes: Revealing the Signature of Geologic Constraints on Landscape Dissection via Topologic and Multi-Scale Analysis. *Geomorphology* 295, 16-27. 2017.
15. Brondizio E., E. Foufoula-Georgiou, S. Szabo, N. Vogt, Z. Sebesvari, F. G Renaud, A. Newton, E. Anthony, A.V. Mansur, Z. Matthews, S. Hetrick, S.M. Costa, Z. Tessler, **A. Tejedor**, A. Longjas, J.A. Dearing. The BF-Deltas project - Catalyzing Action Towards the Sustainability of Deltas. *Curr. Opin. Environ. Sustain.* 19, 182-194. 2016.
16. Szabo, S., E. Brondizio, S. Hetrick, F.G. Renaud, Z. Matthews, R.J. Nicholls, Z. Tessler, **A. Tejedor**, Z. Sebesvari, E. Foufoula-Georgiou, S. Costa, J.A. Dearing. Population dynamics, delta vulnerability and environmental change: Comparison of the Mekong, Ganges-Brahmaputra and Amazon delta regions *Sust. Sci.* 11, 539-554. 2016.
17. Sebesvari Z., F.G. Renaud, S. Haas, Z. Tessler, M. Hagenlocher, J. Kloos, S. Szabo, **A. Tejedor**, C. Kuenzer. A review of vulnerability indicators for deltaic social-ecological. *Sust. Sci.* 11, 575-590. 2016.
18. **Tejedor, A.**, A. Longjas, R. Caldwell, D Edmonds, I. Zaliapin , E. Foufoula-Georgiou. Quantifying the signature of sediment composition on the topologic and dynamic complexity of river delta channel networks and inferences towards delta classification. *Geophys. Res. Lett.* 43, 3280. 2016.
19. **Tejedor, A.**, A. Longjas, I. Zaliapin, and E. Foufoula-Georgiou. Delta Channel Networks: 2. Metrics of topologic and dynamic complexity for delta comparison, physical inference and vulnerability assessment. *Water Resources Research* 51, 4019, 2015.
20. **Tejedor, A.**, A. Longjas, I. Zaliapin, and E. Foufoula-Georgiou. Delta Channel networks. 1. A graph-theoretic approach for studying connectivity and steady-state transport. *Water Resources Research* 51, 3998. 2015.
21. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. The Negative Binomial Distribution as a Renewal Model for the Recurrence of Large Earthquakes. *Pure and Applied Geophysics*, 172, 23-31, 2015.
22. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. One-Way Markov Process Approach to Repeat Times of Large Earthquakes in Faults. *J Stat Phys.* 149:951-963. 2012.
23. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. A hierarchical model for distributed seismicity. *Phys. Rev. E*, 82, 016118. 2010.
24. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. Prediction of stasis and crisis in the Bak-Sneppen model. *Physics Letters A*, 373(44): 4077-4081 2009.
25. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. Earthquake size-frequency statistics in a forest-fire model of individual faults. *emphPhys. Rev. E*, 79, 046102. 2009.

26. **Tejedor, A.**, S. Ambroj, J.B. Gómez, and A.F. Pacheco. Predictability of the large relaxations in a cellular automaton model. *J. Phys. A: Math. Theor.*, 41:375102, 2008.

## UNDER REVIEW

27. **Tejedor, A.**, J. Schwenk, M. Kleinhans, A. Limaye, L. Vulis, P. Carling, H. Kantz and E. Foufoula-Georgiou. The Entropic Braiding Index (eBI): a robust metric to account for the diversity of channel scales in multi-thread rivers. Robustness Assessment of Complex Networks using the Idle Network. *Submitted to Geophys. Res. Lett.* - Preprint available at <https://www.essoar.org/doi/10.1002/essoar.10511421.1>.
28. Marcus, E., **A. Tejedor** and Y. Moreno. Robustness Assessment of Complex Networks using the Idle Network. Preprint available at <https://arxiv.org/abs/2206.00062>.

## Invited Talks

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29. **Tejedor, A.** Diffusion Dynamics on Directed Multiplex Networks: The emergence of an optimal coupling and a new regime of superdiffusion. In: *Workshop on Characterizing Interactions in Complex Systems* - Czech Academy of Sciences, Prague, Czech Republic, November 2019.
30. **Tejedor, A.** What can we learn from the emergent connectivity patterns in geomorphic systems? In: *GAIA seminar series - Géosciences Montpellier* - Université de Montpellier, France, October 2019.
31. **Tejedor, A.** A network-theory approach for studying Earth-surface processes. In: *16th International Workshops on Complex Systems and Networks* - Humboldt-Universität zu Berlin, Germany, September 2019.
32. **Tejedor, A.** Connectivity as a tool to investigate hydro-geomorphic systems. In: *Seminar at the Key Laboratory of Water Cycle and Related Land Surface Processes, CAS* - Beijing, China, September 2019.
33. **Tejedor, A.** What can we learn from the emergent connectivity patterns in geomorphic systems? **Keynote** in: *Non-Equilibrium Flow and Landform Coupling Workshop* - Loughborough University, UK, May 2019.
34. **Tejedor, A.** Diffusion Dynamics and Optimal Coupling in Directed Multiplex Networks In: *Chemnitz-Dresden Focus Meeting on Nonlinear Dynamics and Nonequilibrium Statistical Physics* - TU Chemnitz, Germany, January 2019.
35. **Tejedor, A.** Understanding River Deltas through the lens of their channel networks In: *Asian School of the Environment - Seminars* - Nanyang Technological University, Singapore, February 2018.
36. **Tejedor, A.** Understanding River Deltas through the lens of their channel networks In: *Applied Mathematics - Seminars* - Rochester University of Technology, Rochester, NY, January 2018.
37. **Tejedor, A.** Modeling multi-process connectivity in river deltas: extending the single layer network analysis to a coupled multilayer network framework In: *Fall AGU Meeting*, New Orleans, December 2017.
38. **Tejedor, A.** Experimental evidence of scale-dependent erosional patterns in steady-state and transient-state landscapes. In: *Geoscience Seminars* - University of Nevada, Reno, October 2017.
39. **Tejedor, A.** Delta channel network connectivity. In: *CUNY Advanced Science Research Center*, New York, September 2016.
40. **Tejedor, A.** Decoding the delta *enigma*. In: *Utrecht University*, Utrecht, June 2016.
41. **Tejedor, A.**, I. Zaliapin. Tokunaga Self-Similarity: Statistical inference and applications to river networks. In: *STRESS 4: Connectivity, Non-Linearity, and Regime Transitions in Future Earthscapes Workshop*, Lake Tahoe, NV, April 2013.

## Conference Talks

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42. **Tejedor, A.**, L. Vulis, E. Foufoula-Georgiou, H. Ma, C. Broaddus, D. Edmonds and J. Nienhuis. A transport-based concept of scale and effective resolution in distributary river networks. *Fall AGU Meeting*, New Orleans, December 2021
43. Vulis, L., **A. Tejedor**, I. Zaliapin, J. Rowland and E. Foufoula-Georgiou. The relationship between lake spatial distribution and permafrost processes on arctic deltas. *Fall AGU Meeting*, New Orleans, December 2021
44. Zaliapin, I., Y. Kovchegov, E. Foufoula-Georgiou and **A. Tejedor**. Critical Tokunaga model for river networks. *Fall AGU Meeting*, New Orleans, December 2021
45. Broaddus, C., D. Edmonds, S. Toby, E. Foufoula-Georgiou, **A. Tejedor**, L. Vulis and J. Nienhuis. Simulating Galloway's famous triangle: Testing the hypothesis that rivers, waves, and tides control delta morphology. *Fall AGU Meeting*, Online, December 2020
46. Ferdowsi, B., J. Gartner, K. Johnson, A. Kasprak, K. Miller, W. Nardin, A. Ortiz, M. Perignon, **A. Tejedor**. Earthcasting: Geomorphic prediction for society. *Fall AGU Meeting*, Online, December 2020
47. **Tejedor, A.**, A. Longjas, H. Kantz. E. Foufoula-Georgiou, P. Passalacqua and Y. Moreno. A general framework to study multi-process connectivity: Multilayer Networks. In: *EGU*, Vienna, April 2019.
48. **Tejedor, A.**, A. Longjas, E. Foufoula-Georgiou, T.T. Georgiou and Y. Moreno. Optimal Coupling in Directed Multiplex Networks: A new type of superdiffusion. In: *Conference on Complex Systems, CCS2018*, Thessaloniki, Greece, September 2018.
49. **Tejedor, A.**, A. Longjas and E. Foufoula-Georgiou. River deltas through the lens of their channel networks: Inferring process from form and delta self-organization. In: *Conference on Complex Systems, CCS2018*, Thessaloniki, Greece, September 2018.
50. **Tejedor, A.**, A. Longjas and E. Foufoula-Georgiou. An Optimality underlying self-organization of river deltas. In: *Earth's Dynamic Landscapes - First Annual SoCal Geomorphology Symposium*, Caltech, Pasadena, May 2018.

51. **Tejedor, A.**, A. Longjas, D. Edmonds, I. Zaliapin, T. Georgiou, A. Rinaldo and E. Foufoula-Georgiou. Optimality and self-organization in river deltas. In: *Fall AGU Meeting*, New Orleans, December 2017.
52. **Tejedor, A.**, A. Longjas, and E. Foufoula-Georgiou. Is there a self-organization principle of river deltas? In: *EGU*, Vienna, April 2017.
53. Singh, A., **A. Tejedor**, J.L.Grimaud I. Zaliapin, and E. Foufoula-Georgiou. Quantifying the scale- and process- dependent reorganization of landscape under climatic change: inferences from an experimental landscape. In: *Fall AGU Meeting*, San Francisco, December 2016.
54. Singh, A., **A. Tejedor**, A. Densmore, and E. Foufoula-Georgiou. Landscape response to climate change: quantifying a regime shift in transport processes at the onset of reorganization . In: *EGU*, Vienna, April 2016.
55. **Tejedor, A.**, A. Longjas, R. Caldwell, D Edmonds, I. Zaliapin , E. Foufoula-Georgiou. Moving beyond the Galloway diagrams for delta classification: Connecting morphodynamic and sediment-mechanistic properties with metrics of delta channel network topology and dynamics. *Fall AGU Meeting*, San Francisco, December 2015.
56. **Tejedor, A.**, A. Longjas, I. Zaliapin and E. Foufoula-Georgiou. A graph-theoretic approach to River Deltas: Studying complexity, universality, and vulnerability to change. In: *EGU*, Vienna, April 2015.
57. Singh, A., **A. Tejedor**, I. Zaliapin, L. Reinhardt, and E. Foufoula-Georgiou. Experimental evidence of dynamic re-organization of evolving landscapes under changing climatic forcing. In: *EGU*, Vienna, April 2015.
58. Foufoula-Georgiou, E., J. Schwenk and **A. Tejedor**. Perspective ” Open problems in earth surface dynamics require innovative new methodologies from graph theory and non-linear analysis. In: *EGU*, Vienna, April 2015.
59. Danesh-Yazdi, M., **A. Tejedor**, E. Foufoula-Georgiou. Self-dissimilar Landscapes: Probing into Causes and Consequences via Multi-scale Analysis and Synthesis. *Fall AGU Meeting*, San Francisco, December 2014.
60. Foufoula-Georgiou, E., **A. Tejedor**, A. Longjas, I. Overeem, F. Renaud, and J. Dearing. Constructing vulnerability maps of material and energy pathways in deltas. In: *Deltas in times of climate change II international conference*, Rotterdam (Netherlands), September 2014.
61. **Tejedor, A.**, I. Zaliapin. Tokunaga river networks: New empirical evidence and applications to transport problems. In: *Fall AGU Meeting*, San Francisco, December 2013.
62. Zaliapin, I., **A. Tejedor**. Random self-similar trees: statistical inference and hydrological applications. In: *Mathematical Congress of the Americas 2013*, Guanajuato (Mexico), August 2013.
63. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. A hierarchical model for distributed seismicity. In: *Maths and Earth Workshop*, Zaragoza, June 2011.
64. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. A hierarchical model for distributed seismicity. In: *Syposium Geophysical & Geochemical Geosystems*, Zaragoza, June 2009.
65. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. A hierarchical model for distributed seismicity. In: *EGU General Assembly 2009*, Vienna, April 2009.

## Conference Posters

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66. **Tejedor, A.**, L. Vullis, and E. Foufoula-Georgiou. Towards a process-based classification of delta morphology via quantification of shoreline structure. *Fall AGU Meeting*, New Orleans, December 2021
67. Roy, J., A. Singh, and **A. Tejedor**. Dynamic Connectivity and Topological Controls of River Networks. *Fall AGU Meeting*, New Orleans, December 2021
68. Brown, J., D. Edmonds, S. Toby, C. Broaddus, J. Nienhuis, **A. Tejedor**, L. Vullis and E. Foufoula-Georgiou. A Transit Through Galloway Space: Process Dominance Naturally Changes as Deltas Grow. *Fall AGU Meeting*, New Orleans, December 2021
69. Vullis, L., **A. Tejedor**, I. Zaliapin, J. Rowland and E. Foufoula-Georgiou. Characterizing the Distribution of Lakes on Arctic Deltas. *Fall AGU Meeting*, Online, December 2020
70. Stevens, A., R. Willett, A. Mamalakis, E. Foufoula-Georgiou, P. Le, **A. Tejedor**, J. Randerson, S. Wright and P. Smyth. Graph-guided regularized regression to improve predictive skill of precipitation at seasonal timescales. *Fall AGU Meeting*, Online, December 2020
71. **Tejedor, A.**, J. Schwenk, M.G. Kleinhans, P.A. Carling and E. Foufoula-Georgiou. The Braiding Index 2.0: eBI. In: *Fall AGU Meeting*, San Francisco, December 2019.
72. Vullis, L., **A. Tejedor**, J. Schwenk, A. Piliouras, J.C. Rowland, G. Pease and E. Foufoula-Georgiou. Revealing channel network control on seasonal lake area dynamics in Arctic deltas. In: *Fall AGU Meeting*, San Francisco, December 2019.
73. Roy, J., **A. Tejedor**, and A. Singh. Dynamic clusters to infer topological controls on environmental transport on river networks. In: *Fall AGU Meeting*, San Francisco, December 2019.
74. Stevens, A., R. Willett, A. Mamalakis, E. Foufoula-Georgiou, J. Randerson, P. Smyth, S. Wright and **A. Tejedor**. Graph-Guided Regularization for Improved Forecasting of Southwestern US Winter Precipitation. In: *Fall AGU Meeting*, San Francisco, December 2019.
75. **Tejedor, A.** A network approach to investigate River Deltas. In: *International Workshop on Dynamical Methods in Data-based Exploration of Complex Systems*, Dresden, October 2019.
76. Vullis, L., **A. Tejedor**, J. Schwenk and E. Foufoula-Georgiou. Inferring Surface and Subsurface Lake-Channel Connectivity in Arctic Deltas. In: *EGU*, Vienna, April 2019.

77. Vullis, L., **A. Tejedor**, Schwenk, J. and E. Fofoula-Georgiou. Channel-Lake Connectivity in Arctic Deltas. In: *Fall AGU Meeting*, Washington DC, December 2018.
78. Singh, A., Z. Wu and **A. Tejedor**. Interplay of advective and diffusive processes on landscape organization and evolution. In: *Fall AGU Meeting*, Washington DC, December 2018.
79. Schwenk, J., **A. Tejedor**, E. Fofoula-Georgiou and J.C. Rowland. Automatic Extraction of Delta Channel Network Topology. In: *Fall AGU Meeting*, Washington DC, December 2018.
80. A. Longjas, **Tejedor, A.** and E. Fofoula-Georgiou. River deltas as Multiplex networks: A framework for studying multi-process multi-scale connectivity via coupled-network theory. In: *Earth's Dynamic Landscapes - First Annual SoCal Geomorphology Symposium*, Caltech, Pasadena, May 2018.
81. Singh, A., **A. Tejedor**, JL Grimaud and E. Fofoula-Georgiou. Experimental evidence of rainfall driven knickpoints. In: *Fall AGU Meeting*, New Orleans, December 2017.
82. Longjas, A., **A. Tejedor** and E. Fofoula-Georgiou. Graph Theory Approach for Studying Food Webs. In: *Fall AGU Meeting*, New Orleans, December 2017.
83. Singh, A., **A. Tejedor**, JL Grimaud and E. Fofoula-Georgiou. Experimental evidence of landscape reorganization under changing external forcing: implications to climate-driven knickpoints. In: *EGU*, Vienna, April 2017.
84. **Tejedor, A.**, A. Longjas and E. Fofoula-Georgiou. River delta self-organization via entropy rate analysis. In: *Fall AGU Meeting*, San Francisco, December 2016.
85. Marra, W., **A. Tejedor**, E. Addink, E. Fofoula-Georgiou and M. Kleinhans. Connectivity of Multi-Channel Fluvial Systems: A Comparison of Topology Metrics for Braided Rivers and Delta Networks. In: *Fall AGU Meeting*, San Francisco, December 2016.
86. **Tejedor, A.**, A. Longjas, R. Caldwell, D. Edmonds, I. Zaliapin and E. Fofoula-Georgiou. Moving beyond the Galloway diagrams for delta classification: A graph theoretic approach. In: *EGU*, Vienna, April 2016.
87. Singh, A., **A. Tejedor**, I. Zaliapin, L. Reinhardt and E. Fofoula-Georgiou. Experimental evidence of reorganizing landscape under changing climatic forcing. In: *Fall AGU Meeting*, San Francisco, December 2015.
88. **Tejedor, A.**, A. Longjas, I. Zaliapin and E. Fofoula-Georgiou. A graph-theoretic approach to Studying Deltaic Systems: Quantifying Complexity and Self-Organization. In: *CSDMS Annual Meeting*, Boulder, Colorado, May 2015.
89. Longjas, A., **A. Tejedor**, I. Zaliapin and E. Fofoula-Georgiou. Vulnerability maps of deltas: quantifying how network connectivity modulates upstream change to the shoreline. In: *CSDMS Annual Meeting*, Boulder, Colorado, May 2015.
90. **Tejedor, A.**, A. Longjas, I. Zaliapin, E. Fofoula-Georgiou. Network topology, Transport dynamics, and Vulnerability Analysis in River Deltas: A Graph-Theoretic Approach. In: *Fall AGU Meeting*, San Francisco, December 2014.
91. Fofoula-Georgiou, E., **A. Tejedor**, A. Longjas, I. Zaliapin. Quantitative Metrics of Robustness in River Deltas. In: *Fall AGU Meeting*, San Francisco, December 2014.
92. Longjas, A., **A. Tejedor**, I. Zaliapin, S. Ambroj, E. Fofoula-Georgiou. Network Robustness: the *whole* story. In: *Fall AGU Meeting*, San Francisco, December 2014.
93. Singh, A., **A. Tejedor**, I. Zaliapin, L. Reinhardt, E. Fofoula-Georgiou. Emergent reorganization of an evolving experimental landscape under changing climatic forcing. In: *Fall AGU Meeting*, San Francisco, December 2014.
94. **Tejedor, A.**, A. Longjas, I. Zaliapin, E. Fofoula-Georgiou. Defining network robustness using a dual connectivity perspective. In: *30th IUGG Mathematical Geophysics*, Merida (Mexico), June 2014.
95. **Tejedor, A.**, A. Longjas, I. Zaliapin, E. Fofoula-Georgiou. Asymmetry in the Evolution of Competing Processes in Networks. In: *Network Frontier Workshop*, Northwestern University. Evanston, IL, December 2013.
96. **Tejedor, A.** and I. Zaliapin. Horton and Tokunaga self-similarity for multiplicative coalescent process: numerical approach. In: *Fall AGU Meeting*, San Francisco, December 2–7, 2012.
97. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. Aperiodicity in one-way Markov cycles and repeat times of large earthquakes. In: *Maths and Earth Workshop*, Zaragoza, June 2011.
98. **Tejedor, A.**, J.B. Gómez, and A.F. Pacheco. A hierarchical model for distributed seismicity. In: *European Seismological Commission 32nd General Assembly (ESC2010)*, Montpellier, September 6–10, 2010.