Man Liang, PhD

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EDUCATION

Ph.D. in Civil Engineering - University of Minnesota, Minneapolis, Minnesota **June 2013**

B.S. in Information and Computing Science - Peking University, Beijing, China **July 2007**

RESEARCH EXPERIENCE:

The Water Institute of the Gulf **2016-Present**
- ***Postdoctoral Fellow***

The University of Texas at Austin **2013-2016**
- ***Postdoctoral Fellow***

University of Minnesota – Twin Cities **2008-2013**
- ***Research Assistant***

ExxonMobil Upstream Research Company, Houston, TX **2011, Sept.-Dec.**
- ***Geoscience Intern***

University of Minnesota – Twin Cities **2007-2008**
- ***Civil Engineering Fellow***

PEER REVIEWED PUBLICATIONS

1. **Liang, M.**, Kim, W., and Passalacqua, P. (2016): How much subsidence is enough to change the morphology of river deltas?, Geophysical Research Letters, 43, doi: 10.1002/2016GL070519.

2. **Liang, M.**, Van Dyk, C., and Passalacqua, P. (2016): Quantifying the Patterns and Dynamics of River Deltas Under Conditions of Steady Forcing and Relative Sea-Level Rise, J. Geophys. Res. Earth Surf., 121, doi:10.1002/2015JF003653.

3. **Liang, M.**, Geleynse, N., Edmonds, D. A., and Passalacqua, P. (2015): A reduced-complexity model for river delta formation – Part 2: Assessment of the flow routing scheme, Earth Surf. Dynam., 3, 87-104, doi:10.5194/esurf-3-87-2015.

4. **Liang, M.**, Voller, V. R., and Paola, C. (2015): A reduced-complexity model for river delta formation – Part 1: Modeling deltas with channel dynamics, Earth Surf. Dynam., 3, 67-86, doi:10.5194/esurf-3-67-2015.

5. **Liang, M.**, and Voller, V. R.: Fixed and Deforming Grid Solutions in an Undercooled Melt – A Benchmark Problem (2011), Numerical Heat Transfer, Part B: Fundamentals, 60:1, 1-17, doi:10.1080/10407790.2011.582404.

6. Larsen, L. G., Eppinga, M. B., Passalacqua, P., Getz, W. M., Rose, K. A., and **Liang, M.** (2016): Appropriate complexity landscape modeling, Earth-Science Reviews, 160, 111-130, http://dx.doi.org/10.1016/j.earscirev.2016.06.016.

7. Swanson, T., Mohrig, D., Kocurek, G., and **Liang, M.** (2016): A surface model for aeolian dune topography, Mathematical Geosciences, doi:10.1007/s11004-016-9654-x.

SELECTED CONFERENCE PRESENTATIONS

1. Liang, M., W. Wonsuck, and P. Passalacqua, "Effects of Active Subsidence Vs. Existing Basin Geometry on Fluviodeltaic Channels and Stratal Architecture", EP41B-0922 (poster), American Geophysical Union Fall Meeting, San Francisco, California, December 2015.

2. Liang, M., C. Van Dyk, P. Passalacqua, and W. Kim, "Reduced-complexity model (RCM) for river delta formation – model assessment and application" (poster), Community Surface Dynamics Modeling System Annual Meeting, Boulder, Colorado, May 2015.

3. R. Sincavage, C. Wilson, M. Liang, P. Passalacqua, and S. Goodbred, "Comparing morphologic and stratigraphic field data from a tectonic basin on the Ganges-Brahmaputra river delta with results from a reduced-complexity model for river delta formation" (poster), Community Surface Dynamics Modeling System Annual Meeting, Boulder, Colorado, May 2015.

4. Liang, M., C. Van Dyk, P. Pasaslacqua, S. L. Goodbred, and W. Kim, "Exploring the effects of base-level change and differential subsidence on fluviodeltaic channels with a reduced-complexity model (invited talk)", American Geophysical Union, San Francisco, California, December 2014.

5. C. Van Dyk, M. Liang, and P. Passalacqua, "A reduced complexity approach to morphodynamic modeling: Validation of DeltaRCM and prediction of fluviodeltaic channel dynamics", AGU Fall Meeting Abstracts 1- 3501 (poster), American Geophysical Union, San Francisco, California, December 2014.

6. Liang, M., N. Geleynse, P. Passalacqua, D.A. Edmonds, W. Kim, V.R. Voller, and C. Paola, "Validation of a parcel-based reduced-complexity model for river delta formation (invited talk)", American Geophysical Union, San Francisco, California, December 2013.

7. Liang, M., V.R. Voller, C. Paola, P. Passalacqua, and N. Geleynse, "A parcel-based cellular routing model for river delta formation", Joint Penrose/Chapman Conference, Galveston, TX, Apr. 2013.

8. Liang, M., V.R. Voller, and C. Paola, "A new channel-resolving reduced-complexity detla model", AGU Fall Meeting Abstracts 1-0658 (poster), American Geophysical Union, San Francisco, California, December 2011.

9. Liang, M., V. Voller, and C. Paola, "A reduced-complexity channel-resolving model for sedimentary delta formation (keynote talk)", Community Surface Dynamics Modeling System Annual Meeting, Boulder, Colorado, October 2011.

10. Liang, M., V.R. Voller, D.A. Edmonds, and C. Paola, "Toward a reduced-complexity channel resolving model for sedimentary delta formation", AGU Fall Meeting Abstracts 1-0587 (poster), American Geophysical Union, San Francisco, California, December 2010.

11. Liang, M., V.R. Voller, C. Paola, and D.A. Edmonds, "A CAFE Delta Building Model With Channel Networks", AGU Fall Meeting Abstracts 1-0596 (poster), American Geophysical Union, San Francisco, California, December 2009.

AWARDS, HONORS

- Community Surface Dynamics Modeling System (CSDMS) Student Modeler Award, 2011
- Sommerfeld/Civil Engineering 21st Century Fellowship, University of Minnesota, 2007

TEACHING EXPERIENCE

- Computer Applications in Civil Engineering, University of Minnesota, 2010 spring
- Fluid Mechanics, University of Minnesota, 2009 fall
- Lecturer and Mentor at the Summer Institute on Earth Surface Dynamics (SIESD), National Center for Earth-surface Dynamics (NCED), 2014-2015.

PROFESSIONAL SERVICES

- Session Convener and Chair at the annual meeting of the American Geophysical Union (AGU 2015) and Geological Society of America (GSA 2016).
- Lecturer and Mentor at the Summer Institute on Earth Surface Dynamics organized by National Center for Earth-surface Dynamics (2014 and 2015).
- Student Modeler at the Science Museum of Minnesota to design numerical models for "Future Earth" exhibition (2010-2011).

PROFESSIONAL MEMBERSHIPS

- American Geophysical Union (AGU), Member since 2009
- Community Surface Dynamics Modeling System (CSDMS), Member since 2010
- Geological Society of America (GSA), Member since 2016