

Stanford



Ju Liu

Postdoctoral Research Fellow, Cardiology

Bio

HONORS AND AWARDS

- Robert J. Melosh Medalist, Duke University (2013)

PROFESSIONAL EDUCATION

- Bachelor of Science, Xi'An Jiaotong University (2008)
- Doctor of Philosophy, University of Texas Austin (2014)

STANFORD ADVISORS

- Alison Marsden, Postdoctoral Faculty Sponsor

LINKS

- <http://ju-liu.github.io>: <http://ju-liu.github.io>

Publications

PUBLICATIONS

- **Liquid-vapor phase transition: Thermomechanical theory, entropy stable numerical formulation, and boiling simulations** *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING*
Liu, J., Landis, C. M., Gomez, H., Hughes, T. J.
2015; 297: 476-553
- **Functional entropy variables: A new methodology for deriving thermodynamically consistent algorithms for complex fluids, with particular reference to the isothermal Navier-Stokes-Korteweg equations** *JOURNAL OF COMPUTATIONAL PHYSICS*
Liu, J., Gomez, H., Evans, J. A., Hughes, T. J., Landis, C. M.
2013; 248: 47-86
- **Isogeometric analysis of the advective Cahn-Hilliard equation: Spinodal decomposition under shear flow** *JOURNAL OF COMPUTATIONAL PHYSICS*
Liu, J., Dede, L., Evans, J. A., Borden, M. J., Hughes, T. J.
2013; 242: 321-350