

# Biographical Sketch for Ryan S. Elliott, Ph.D.

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## Professional Preparation

Michigan State University	Engineering Mechanics	B.S.	1998
University of Michigan	Aerospace Engineering	M.S.E.	1999
University of Michigan	Mathematics	M.S.	2002
University of Michigan	Aerospace Engineering & Computational Science	Ph.D.	2004

## Appointments

University of Minnesota	Associate Professor, with tenure	2011–Present
École Polytechnique (France)	Visiting Researcher (LMS)	8/2010–12/2010
University of Minnesota	Assistant Professor	2005–2011
University of Michigan	Research Fellow & Teaching Assistant	1999–2004
Los Alamos National Laboratory	CSGF Fellow Practicum	2001
Michigan State University	Research Assistant — Biomechanics Evaluation Lab	1995–1998

## Recent Representative Publications

- ▶ Amartya S. Banerjee, Ryan S. Elliott, Richard D. James. “A spectral scheme for Kohn-Sham density functional theory of clusters.” *J Comput Ph*, 287:226–253, 2015. URL <http://dx.doi.org/10.1016/j.jcp.2015.02.009>
- ▶ Subrahmanyam Pattamatta, Ryan S. Elliott, Ellad B. Tadmor. “Mapping the stochastic response of nanostructures.” *P NAS USA*, 111(17):E1678–E1686, April 2014. URL <http://dx.doi.org/10.1073/pnas.1402029111>
- ▶ Viacheslav Sorkin, Ryan S. Elliott, Ellad B. Tadmor. “A local quasicontinuum for 3D multilattice crystalline materials: Application to shape-memory alloys.” *Mod Sim Mat*, 22:055,001 (22pp), 2014. URL <http://dx.doi.org/10.1088/0965-0393/22/5/055001>
- ▶ *kim-api-v1.7.0*, <https://openkim.org/kim-api>. R. S. Elliott, E. B. Tadmor. Released: 11/21/2014
- ▶ Ellad B. Tadmor, Ryan S. Elliott, Simon R. Phillpot, Susan B. Sinnott. “NSF cyberinfrastructures: a new paradigm for advancing materials simulation.” *COSSMS*, 17(6):298–304, December 2013. URL <http://dx.doi.org/10.1016/j.cossms.2013.10.004>
- ▶ Ryan S. Elliott, Daniel S. Karls. “Entropic stabilization of austenite in shape memory alloys.” *J Mech Phys*, 61(12):2522–2536, December 2013. URL <http://dx.doi.org/10.1016/j.jmps.2013.07.013>
- ▶ Venkata Suresh Guthikonda, Ryan S. Elliott. “Modeling martensitic phase transformation in shape memory alloys with the self-consistent lattice dynamics approach.” *J Mech Phys*, 61(4):1010–1026, April 2013. URL <http://dx.doi.org/10.1016/j.jmps.2012.12.003>

## Fellowships and Awards

Thomas J.R. Hughes Young Investigator Award, Applied Mechanics Division, ASME	2014
Russell J. Penrose Faculty Fellow, AEM Department, University of Minnesota	2012–2015
McKnight Land-Grant Professorship, The University of Minnesota	2009–2011
NSF CAREER grant, National Science Foundation, U.S.A.	2007–2012
Frederick A. Howes Scholar in Computational Science, U.S. Department of Energy	2005
Ivor K. McIvor Award for outstanding graduate students in applied mechanics	2004
Computational Science Graduate Fellowship U.S. Department of Energy	2000–2004
Tau Beta Pi — Matthews Fellow	1998–1999

## Graduate and Undergraduate Advisors

University of Michigan	Nicolas Triantafyllidis & John A. Shaw
Michigan State University	Robert Wm. Soutas-Little