

CURRICULUM VITAE

GARY R. LAWLOR

Address

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Professional Preparation

Brigham Young University	Mathematics	BS, 1984
Stanford University	Mathematics	Ph.D. 1988
Princeton University	Geometric Measure Theory	1988–1991 (postdoctoral)

Appointments

Brigham Young University	Associate Professor	1997–present
University of Granada, Spain	Visiting Professor	Fall, 1999
Brigham Young University	Assistant Professor	1991–1997
Princeton University	Assistant Professor (partially concurrent with postdoc)	1989–1991

Publications

1. Lawlor, Gary. An eigenargument for irrational roots. *College Math. J.* **52** (2021), no. 2, 140–141.
2. Lawlor, Gary. l'Hôpital's rule for multivariable functions. *Amer. Math. Monthly* **127** (2020), no. 8, 717–725.
3. Lawlor, Gary R., Perimeter-minimizing triple bubbles in the plane and the 2-sphere. *Anal. Geom. Metr. Spaces*, **7**, (2019), no. 1, 45–61,
4. Lawlor, Gary R., Double bubbles for immiscible fluids in $\mathbb{R}^n$. *J. Geom. Anal.*, **24**, (2014), no. 1, 190–204.
5. Dorff, Rebecca; Johnson, Drew; Lawlor, Gary R.; Sampson, Donald, Isoperimetric surfaces with boundary, *Proc. Amer. Math. Soc.*, **139** (2011), no. 12, 4467–4473.
6. Dorff, Rebecca; Lawlor, Gary; Sampson, Donald; Wilson, Brandon, Proof of the planar double bubble conjecture using metacalibration methods. *Involve* **2** (2009), no. 5, 611–628.
7. Kerckhove, Michael; Lawlor, Gary, The circle and the cycloid: a surprising link. *Amer. Math. Monthly* **114** (2007), no. 5, 441–443.
8. Halverson, Denise; Lawlor, Gary, Area-minimizing subsurfaces of Scherk's singly periodic surface and the catenoid. *Calc. Var. Partial Differential Equations* **25** (2006), no. 2, 257–273.

9. Dorff, Michael; Halverson, Denise; Lawlor, Gary, Area-minimizing minimal graphs over non-convex domains. *Pacific J. Math.* **210** (2003), no. 2, 229–259.
10. Kerckhove, Michael; Lawlor, Gary, A family of stratified area-minimizing cones. *Duke Math. J.* **96** (1999), no. 2, 401–424.
11. Lawlor, Gary, Proving area minimization by directed slicing. *Indiana Univ. Math. J.* **47** (1998), no. 4, 1547–1592.
12. Lawlor, Gary; Morgan, Frank. Curvy slicing proves that triple junctions locally minimize area. *J. Differential Geom.* **44** (1996), no. 3, 514–528.
13. Lawlor, Gary, A new minimization proof for the brachistochrone. *Amer. Math. Monthly* **103** (1996), no. 3, 242–249.
14. Lawlor, Gary; Murdoch, Timothy. A note about the Veronese cone. *Illinois J. Math.* **39** (1995), no. 2, 271–277.
15. Lawlor, Gary; Morgan, Frank. Paired calibrations applied to soap films, immiscible fluids, and surfaces or networks minimizing other norms. *Pacific J. Math.* **166** (1994), no. 1, 55–83.
16. Lawlor, Gary, Pairs of planes which are not size-minimizing. *Indiana Univ. Math. J.* **43** (1994), no. 2, 651–661.
17. Lawlor, Gary, Area-minimizing m -tuples of k -planes. The problem of Plateau, 165–180, World Sci. Publ., River Edge, NJ, 1992.
18. Lawlor, Gary, A sufficient criterion for a cone to be area-minimizing. *Mem. Amer. Math. Soc.* **91** (1991), no. 446, vi+111 pp.
19. Lawlor, Gary, The angle criterion. *Invent. Math.* **95** (1989), no. 2, 437–446.

Graduate Students Supervised

Thomas Bell, chair, master’s thesis, 2007

Vici Herbst Kim, chair, master’s project, 1998

Other activities and awards

Undergraduate research mentor, 2017-20.

Department of Mathematics Distinguished Teaching Award (2015).

Directed undergraduate research in BYU summer REU, 2005, 2006, 2008. Led three or four students each summer in learning and investigating geometric minimization problems.

Served as mentor for BYU Honors theses for Donald Sampson (2010) and Heather Florence (2004).

Awarded a BYU Teaching and Learning with Technology fellowship, 2003-2004. Developed a system to capture a video from writing on a whiteboard while speaking, to post on the web and give extra help to students.

Student award for Teacher of the Year in mathematics, 1998.