

FRAMEWORKS IN MOTION:

DESIGN, THEORY, AND FABRICATION

Friday, March 31, 2023

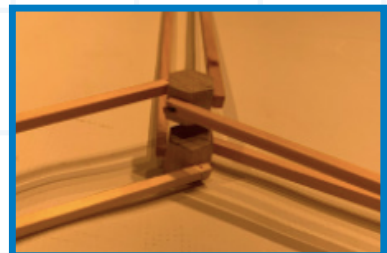
Noon

Arter Hall, Room 118

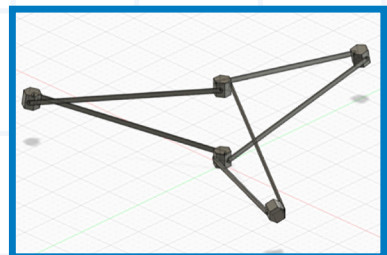


Dr. Jessica Sidman

Professor of Mathematics
on the John S. Kennedy Foundation,
Mount Holyoke College

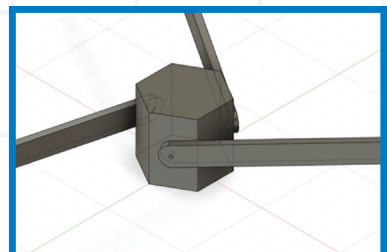


What do your umbrella, a folding gate, and a scissor lift have in common? They all involve frameworks made of rigid parts attached at flexible joints and are designed to move with one degree of freedom. In 1981 architect Santiago Calatrava wrote a Ph.D. thesis, “Concerning the Foldability of Space Frames,” containing a systematic exploration of the geometry and design of foldable frameworks. I’ll use his thesis as a jumping off point to explore the Laman-Pollaczek-Geiringer Theorem and connections to a project about (re)designing a tent framework with architect Naomi Darling.



Lunch will be provided

Funded by the Leila Parsons Fund and the William Beazell Fund



Images by Sohini Bhatia, Mount Holyoke College '23