

# Carlos Salinas

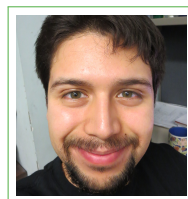
## Résumé

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اجرام که ساکنان این ایوانند  
اسباب تردد خردمندانند  
هان تاسر رشته خرد گم نکنی  
کانان که مدبرند سرگردانند  
عمر خیام

I am broadly interested in mathematics, but specifically interested in geometry (the algebraic computational kind). The fields I am hoping to explore next are algebraic topology and homotopy theory. I am highly interested in theoretical physics.

## Education

- 2014-present **Ph.D. in Mathematics**, *Purdue University*, West Lafayette, IN, USA.  
Currently a graduate student working towards my Ph.D.
- 2012-2014 **B.S. in Mathematics**, *University of Texas–Pan American*, Edinburg, TX, USA.  
I graduated on May 2014 with a Bachelor of Science in Mathematics with a concentration in Pure Mathematics.
- 2009-2011 **B.S. in Materials Science**, *Massachusetts Institute of Technology*, Cambridge, MA, USA.  
Spent four semesters studying towards a degree in materials science. Withdrew from the program for personal and medical reasons.

## Experience

### Working

- 2010-2010 **Research Assistant**, *Center for Materials Science and Engineering*, Cambridge, MA, USA.  
I worked with Dr. Samuel Allen on the crystallography and grain structure of Ti–TA shape-memory alloys using an electron microscope.
- 2013-2014 **Lab Manager**, *University of Texas–Pan American*, Edinburg, TX, USA.  
I supervise UTPA's branch of the *Experimental Algebra and Geometry Lab*. My duties include: updating hardware and software on the lab's machines; the lab's 3D printer; announcing and running the *Secret Student Seminar*.

### Academic

- 2013-2013 **Summer Research Opportunity Program Student**, *Northwestern University*, Evanston, IL, USA.  
I worked on a directed reading on *Applications of the Lefschetz Fixed-Point Theorem* under the supervision of Dr. Paul Goerss.
- 2013-2014 **Undergraduate Researcher**, *University of Texas–Pan American*, Edinburg, TX, USA.  
I am studying the topology of  $SL_n(\mathbb{C})$ -character varieties and problems related to the character of words represented in  $SL_n(\mathbb{C})$  in collaboration with Dr. Sean Lawton.

## Conferences & Workshops

- Nov. 1, **Field of Dreams Conference**, Phoenix, AZ, USA.
- 2013-Nov. 3 I attended the *Seventh Annual Mathematical Field of Dreams Conference*, held at the Phoenix  
2013 East/Mesa Hilton Hotel in Mesa, Arizona.
- Dec. 16, **Character Varieties and Geometric Structures Workshop**, Washington, D.C.,  
2013-Dec. 20 USA.
- 2013 I attended the *Character Varieties and Geometric Structures Workshop* held at Washington, D.C. and prepared a 30 min. lecture on characters of free groups represented in  $SL_2(\mathbb{C})$  and presented some of my current research.

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## Computer Skills

**Platforms** Linux, Windows

**Programming Languages** C/C++, Haskell,  $\text{\LaTeX}$ , Mathematica, MATLAB/Octave, Python, Racket/Scheme, Sage

**Tools** All \*NIX shell tools, Emacs, Inkscape, Gimp, Git, LibreOffice, MakerWare

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## Languages

English Native

Русский Advanced

Deutsch Pre-intermediate

Türkçe Pre-intermediate

日本語 Beginner

Español Native

فارسی Intermediate

Français Pre-intermediate

한국어 Beginner

中文 Beginner