Eduardo Torres Davila

CONTACT
INFORMATION

University of Minnesota
Department of Mathematics

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EDUCATION

2020 – present   **University of Minnesota**
PhD in Mathematics

2016 – 2020   **San Diego State University**
BS in Applied Mathematics
Minor: Computer Science

PUBLICATIONS

Numerical semigroups, polyhedra, and posets II: locating certain families of semigroups,
with Jackson Autry, Abigail Ezell, Tara Gomes, Christopher O'Neill, Christopher Preuss,
& Tarang Saluja,
to appear, Advances in Geometry. (doi)(arXiv:1912.04460)

PREPRINTS

Numerical semigroups, polyhedra, and posets III: minimal presentations and face dimension,
with Tara Gomes & Christopher O'Neill, **submitted**. (arXiv:2009.05921)

Visualizing the support of Kostant's weight multiplicity formula for the rank two Lie algebras,
with Pamela E. Harris, Marissa Loving, Juan Ramirez, Joseph Rennie, Gordon Rojas Kirby,
& Fabrice O. Ulysse, **submitted**. (arXiv:1908.08405)

CONFERENCES
/PROGRAMS
ATTENDED

Semigroups, Generating functions, and Polytopes (SGPs) Research Seminar
JMM Denver, Colorado, January 2020
  • Undergraduate Poster Session (Honorable Mention)
Field Of Dreams Conference St. Louis, Missouri, November 2019
SACNAS National Conference Honolulu, Hawaii, October 2019
Math Alliance Facilitated Graduate Applications Process (F-GAP)

MATHEMATICS
RESEARCH
EXPERIENCE

Summer 2020   *Funded Research in Combinatorial & Commutative Algebra.*
     Advisor: Christopher O'Neill, Department of Mathematics,
     San Diego State University.

2019 – 2020   *Funded Research in Polyhedral Geometry.*
     Advisor: Christopher O'Neill, Department of Mathematics,
     San Diego State University.

Summer 2019   *REU in Applied Combinatorics & Discrete Mathematics* (**MSRI-UP**).
Mathematical Science Research Institute, Berkeley, CA, USA.
     Advisor: Pamela E. Harris, Department of Mathematics,
     Williams College.

Spring 2019   *Research in Numerical Semigroups.*
     Advisor: Christopher O'Neill, Department of Mathematics,
     San Diego State University.

TALKS	San Diego State University, SGPs Resarch Seminar, September 2020 *Minimizing minimal presentations*
	San Diego State University, SGPs Research Seminar, March 2020 *Minimal presentations of Kunz posets*
	Mathematical Sciences Research Institute, MSRI-UP, July 2019 *Visualizing the support of Kostant's weight multiplicity formula for the rank two Lie algebras*
WRITING CONTRIBUTIONS	*Networking Basics for Math Undergrads*, with Joanne Beckford, Alex Christensen, Pamela E. Harris, Lucy Martinez, & Fabrice O. Ulysse, e-Mentoring Network in the Mathematical Sciences - connecting students and mentors. AMS Blogs. July 21, 2020.
	Bank of REU/Grad Fair Questions, with Pamela E. Harris & Lucy Martinez, e-Mentoring Network in the Mathematical Sciences - connecting students and mentors. AMS Blogs. January 24, 2020.
RELEVANT SKILLS	Programming: Python, Sage, C/C++, Bash, Java
	Languages: English, Spanish