

CITATION OF THE GOLDEN SECTION SATURDAY MARCH 4, 2017 SANTA CLARA UNIVERSITY

Jesús De Loera earned a B.S. in Mathematics from the National University of Mexico in 1989, an M.A. in Mathematics from Western Michigan University in 1990, and a Ph.D. in Applied Mathematics from Cornell University in 1995. Jesús joined the mathematics faculty at the University of California, Davis, in 1999, but he has also taught at other universities in the U.S., Mexico, Germany, and Switzerland.

Jesús is a highly successful researcher. Over the course of his career, he has published upwards of 50 papers in professional journals and has authored two books. Indeed, Jesús' research has been recognized several times over:

He was awarded a 2004 Alexander von Humboldt Fellowship, the 2010 INFORMS Computing Society Prize, and a 2013 John von Neumann Professorship at the Technical University of Munich. In addition, Jesús has been a plenary or semi-plenary speaker at many major conferences and meetings, including the SIAM Annual Meeting, MAA MathFest, AMS regional meetings, CombinaTexas, and CanaDAM, as well as having been an invited colloquium speaker at institutions such as MIT, Caltech, Oxford University, UC Berkeley, UC Santa Cruz, the MAA Carriage House, Claremont-McKenna College, Hong Kong University, and the Courant Institute (NYU). But enough about all that—this is a *teaching* award.

Jesús' greatest impact since arriving at UC Davis clearly has been on his students, both undergraduate and graduate. Just from the numbers, we know that he has supervised or is supervising 30 undergraduate honors theses, with more than 50 undergraduates having conducted research with him, and 12 Ph.D. students. **PLUS!** Jesús has supervised seven postdoctoral researchers. More personally, two comments from student evaluations state:

- “[He is] a teacher who is excited and energetic and his enthusiasm rubs off on everyone” and
- “Prof. De Loera is the best math professor I have ever had. He used good examples, uses humor, and speaks in terms everyone can understand. He kept a light atmosphere and was able to teach everyone.” Indeed, one of Jesús' colleagues wrote,
- “He is legendary among students for being friendly, caring and down-to-earth, and everybody (not just students) admire his ability to always find a kind word.”

Jesús is always working to ensure the continuation of our profession. In his own words (from his web-page):

“I always try to convince students into becoming math majors or minors. For this reason, I have taught Freshman Seminars, [am the] math club advisor, and [have] taught for COSMOS (a program for talented high school students in California).”



He is also the faculty advisor for CALESS (Chicanos and Latinos in Engineering and Science), and supports MCNAIR and MURRPS (programs that facilitate the participation of minorities in the mathematical and physical sciences).

Jesús is passionate about attracting and supporting students from the underrepresented groups, and his efforts have been recognized. In a letter of support, a former student wrote,

- “I believe that Professor De Loera is not only very encouraging of women in mathematics, but that he sees us as an important component of the mathematical world... Additionally, he strongly believes in the importance of diversity, and he creates a very open and encouraging environment for all students... Professor De Loera has inspired me to want to work with students and try to help them as much as he has helped me.”

Jesús is also known to go the extra mile for his students; for example, in another letter of support, a current student wrote,

- “I was very nervous during my preparation for my QE [qualifying (oral) exam]... Rather than simply pacifying me, Jesús carved an additional meeting each week out of his schedule to dedicate to practicing oral examination with me. For months, Jesús quizzed me weekly ... [all the while] he had four other [Ph.D.] students....”

For his dedication to outstanding mentoring and teaching, Jesús received the 2003 UC Davis Chancellor's fellow award, the 2006 UC Davis award for diversity, the 2007 Award for Excellence in Service to Graduate Students by the UC Davis graduate student association and the 2013 Chancellor's Award for mentoring undergraduate research. But Jesús' impact upon students goes beyond his direct interaction with them; he also works behind the scenes. At UC Davis, he has served as Vice-Chair of Undergraduate Affairs for the Mathematics Department and as the Faculty Assistant to the Dean of Mathematical and Physical Sciences in undergraduate matters. Jesús also tries to make a positive difference for students beyond UC Davis; for example, he recently served on the AMS Committee of Education. Most recently, he has dedicated a great amount of effort to establishing stronger academic cooperation with Mexican universities through the promotion of short research stays by undergraduate and graduate students, a model of cooperation that has larger impact in the education and careers of Mexican students and that publicizes their amazing abilities, until now largely ignored by universities in the U.S.

In summary, Jesús De Loera is both a researcher and a teacher, excelling as both. Indeed, in his philosophy, teaching, mentoring, and research are all inextricably intertwined. We posit that the thousands of students who have been touched by his teaching, guidance, and mentorship—and salesmanship!—in some way over the years would surely agree.

We are proud to present this year's Section Award for Distinguished College or University Teaching of Mathematics to Jesús De Loera, an extraordinarily effective and inspiring teacher.

