Faculty News

Departures

Ignacio Bello passed away last August. Born in Cuba, he arrived at USF in the early '60s as an undergraduate student and graduated in 1967 with a Masters in mathematics. He then worked for four years at USF as a mathematics instructor before moving to Hillsborough Community College, where he ultimately became Coordinator of the Math & Sciences Department. He published over fifty textbooks and made many presentations on mathematics education at the local, state, and national levels. After his retirement from HCC, he worked as an adjunct at USF and became one of the department's notable characters.

Arcadii Z. Grinshpan has retired. He arrived at USF in 1992 as a visitor while serving as a leading researcher for the Center for International Environmental Cooperation and the Russian Academy of Science of St. Petersburg. (He had received his Ph.D. in mathematics from St. Petersburg & Donetsk State Universities in 1973 and worked as a Researcher at the Central Scientific Research Institute of Fuel Equipment until 1991.) At USF, he oversaw the Industrial Mathematics program and organized the Mathematics Umbrella Group. An active researcher, he published 79 papers in complex analysis, inequalities, modeling, numerical analysis, and special functions.

Athanassios "Soulis" Kartsatos has retired. He arrived at USF in 1971, one year after receiving his Ph.D. from the National and Kapodistrian University of Athens in Greece. He specialized in nonlinear functional analysis and evolution equations, including nonlinear operator theory and nonlinear control theory. A prolific researcher, he published 160 papers and supervised 22 Ph.D. students at USF. More recently, he became active in computer graphics and computer-generated

artwork. He was promoted to full professor in 1978, and upon retirement, he was awarded emeritus status.

Arrivals

Christian Barrientos is a new assistant professor of instruction. Professor Barrientos received his Ph.D. in applied mathematics from the Universitat Politècnica de Catalunya in Barcelona, Spain, in 2004, for his work on *Difference Vertex Coverings* under the direction of Oriol Serra Albó and Francesc Muntaner. He is an author or co-author of 52 published articles, largely in combinatorics, and is a frequent contributor to the *Online Encyclopedia of Integer Sequences*. He comes to USF from Valencia College in Orlando, where he taught for four years.

Robert Freeman is a new assistant professor of instruction. Professor Freeman received his Ph.D. in mathematics from USF in 2020 for his work *On the p(x)-Laplace equation in Carnot groups*, conducted under the direction of Thomas Bieske. He has coauthored three published articles. He comes to USF from Pennsylvania State University - Berks, where he taught for three years.

Lukas Kölsch is a new assistant professor. Professor Kölsch received his Ph.D. from the University of Rostock, in Germany, for his work *on Mathematical aspects of the design and security of block ciphers*. He came to USF as a postdoctoral scholar from Rostock in 2021, and his research focus is on finite fields, finite geometry, (vectorial) Boolean functions and combinatorics, and their applications to codes and cryptography.

Zhenkun Li is a new assistant professor. Professor Li received his Ph.D. in mathematics in 2020 for his work on *Contributions to sutured monopole and sutured instanton Floer homology theories* under the direction of Tomasz Mrowka. His research focus is on low dimensional topology, particularly knot theory, gauge theory, and Floer homology. He has authored or coauthored fifteen articles. He comes to us from Stanford University, where he was the Szegö Assistant Professor for three years. He arrives with a 2-year AMS-Simons Travel Award for $7,200.

Moving Up

Joy D'Andrea was promoted from Instructor I to Associate Professor of Instruction last year. Professor D'Andrea came to USF Sarasota / Manatee from Polk State College in 2013, and after visiting for three years, she became permanent in 2016. She received her Ph.D. in mathematics from USF in 2016.

Jean-François Biasse was promoted from Associate Professor to Professor this year. Professor Biasse received his Ph.D. from the École Polytechnique in 2010 and arrived at USF in 2015. He is now the director of the *USF Center for Cryptographic Research*, an associate editor of the *International Journal of Computer Mathematics Computer Systems Theory*, and the co-director of the *CodeBreakHERS* summer camp for girls in grades 9-12. His research focuses on number fields, lattice ideals, and computational algebra, and he is partially supported by a NSF grants (see below).

Robert Connelly was promoted from Assistant Instructor to Associate Instructor this year. Professor Connelly received his MA in mathematics from USF and has worked as a substitute teacher in the Pinellas County School District and a tutor at the Palm Harbor Sylvan Center.

Vladimir Grupcev was promoted from Instructor I to Associate Professor of Instruction this year. He received his Ph.D. in Computer Science and Engineering in 2016 and came to USF after working at Hillsborough Community College.

Marian Hernandez Viera was promoted from Instructor I to Associate Professor of Instruction last year. Professor Hernandez Viera came to USF Tampa from the University of Puerto Rico - Río Piedras in 2016, and she became permanent in 2017.

Radford Janssens was promoted from Instructor I to Associate Instructor last year. Mr. Janssens came to USF St. Petersburg from Invista (where he was a Quality Assurance, Environmental, Safety and Capital Projects Manager) in 2014, and after four years as an adjunct and a visitor, he became permanent in 2018.

Stephen Lappano was promoted from Instructor I to Associate Professor of Instruction last year. Professor Lappano came to USF as a graduate student and became permanent in 2017.

Theodore Molla was promoted from Assistant Professor to Associate Professor last year. Professor Molla arrived at USF in 2017 from the University of Illinois at Urbana-Champaign. His research is various aspects of graph theory, and his project on *Global Structures in Graphs and Directed Graphs* is partially supported by a $130,029 grant from the NSF.

Giacomo Micheli was awarded tenure and promoted from Assistant Professor to Associate Professor this year. Professor Micheli received his Ph.D. with distinction in 2015 from the Zurich Graduate School in Mathematics, a joint program of the University of Zürich and the Swiss Federal Institute of Technology in Zürich. Before coming to USF in 2019, Professor Micheli held research positions at MIT, the University of Oxford, and at the École Polytechnique Fédérale de Lausanne. His research focuses on the areas of applied algebra and number theory and is currently supported by a $500,000 NSF core grant. Professor Micheli is a co-director of the *USF Center for Cryptographic Research*.

Jennifer Swartout was promoted from Instructor I to Associate Instructor last year. Ms. Swartout came to USF St. Petersburg from State College of Florida in 2016, and became permanent in 2018. She had previously been a licensed building instructor.

Richard "Rick" Warner was promoted from Instructor I to Associate Instructor last year. Mr. Warner came to USF as an undergraduate student in 2011. From 2013-2017, Rick was the Associate Director of the *USF STEM Education Center.* After being hired as a Visiting Instructor at USF Sarasota/Manatee in 2016, he was made permanent in 2018.
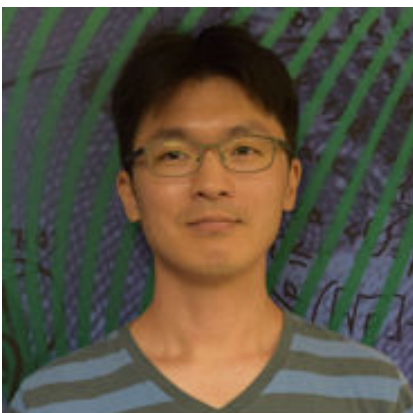

Razvan Teodorescu was promoted from Associate Professor to Professor this year. Professor Teodorescu received his Ph.D. from the University of Chicago in 2004 and came to USF in 2009. He received the Jerome Krivanek Distinguished Teacher Award in 2019. His research focuses on mathematical physics, analysis, differential equations, optimization, computational methods, and stochastic processes.

Leadership

☛ In August 2022, **Lesław Skrzypek** - who had served as chair since 2014, stepped down.

The new chair is **Dmytro ☛ Savchuk**, who arrived at USF in 2012 and was awarded tenure in 2016. An algebraist, he has a long history of service.

☛ Last Fall, **Seung-Yeop Lee** became Associate Chair for Graduate Affairs. He arrived at USF in 2013 and achieved tenure in 2017.

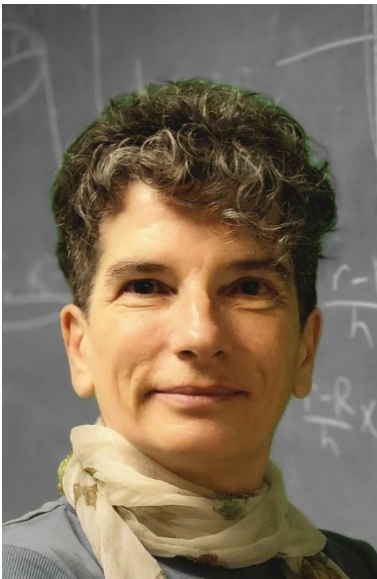Last Fall, **Stephen D. ☛ Lappano** became Associate Chair for Undergraduate Affairs. He arrived at USF

as a graduate student in
2010.

Other News

Jean-Francois Biasse and **Dmytro Savchuk** received a $427,000 grant from the National Science Foundation to run a 3-year Research Experience for Undergraduates (REU-Site) program on *Cryptography and Coding Theory*. This program, run by the USF Center for Cryptographic Research. is a collaboration between the departments of Mathematics & Statistics and Computer Science & Engineering (CSE). The other senior personnel of this grant are **Xiang-Dong Hou**, **Lukas Kölsch**, **Giacomo Micheli**, **Vincenzo Pallozzi Lavorante**, **Hemant Pendharkar**, and CSE faculty **Mehran Mozzafari Kermani** and **Attila Yavuz**.

This REU program will support a total of 30 undergraduate students working on various projects pertaining to cryptography and coding theory.

Nataša Jonoska was elected to the Macedonian Academy of Sciences and Arts. Professor Jonoska's research focuses on biomolecular computation, symbolic dynamics, and formal languages.

She and Professor Savchuk organized a joint conference on *Discrete and Topological Models in Molecular Biology* (DTMB 2022) and *Developments in Language Theory* (DLT 2022) at USF last May. They got three grants to support the conference.

Catherine Beneteau and **Dmitry Khavinson** are co-organizers of the upcoming conference on *Harmonic and Complex Analysis: Modern and Classical International Conference*, along with eleven other co-organizers from Bar-Ilan University, Braude College, and the Holon Institute of Technology in Israel, where the conference will be held. The conference is in honor of Professor Larry Zalcman and will focus on complex and harmonic analysis and the borderline between mathematics and physics, including applications to quantum physics, noise abatement walls, LEDs, optical devices, medical imaging, gravitational lensing and probability theory.

Partial support was provided by a $42,500 grant from the NSF, which includes enabling students and postdocs **Louis Arenas**, **Nathan Hayford**, and **Sean Perry** to attend, as well as faculty members **C. Beneteau**, **D. Khavinson**, and **Arthur Danielyan**.

Wen-Xiu Ma is now a full member of the prestigious Sigma Xi honor society; membership is by invitation only. Founded in 1886 and consisting of scientists and engineers, it has the mission, "To enhance the health of the research enterprise, foster integrity in science and engineering, and promote the public's understanding of science for the purpose of improving the human condition."

Ralph Oberste-Vorth passed away in November. Professor Oberste-Vorth received his Ph.D. from Cornell University in 1987 and came to USF in 1989 after spending a year at the Institute for Advanced Study in Princeton. In the department, he served as associate chair from 1998 to 2002, when he left for Marshall University in Huntington, West Virginia, where he served as chair until 2011, when moved to Indiana State University at Terre Haute. He taught at Indiana State until 2016, when he had to step down for reasons of health, and he ultimately moved back to Florida.

Dmytro Savchuk co-organized a conference on *Groups of Dynamical Origins, Automata and Spectra*; the other co-organizers were Tatiana Nagnibeda of the University of Geneva and Volodymyr Nekrashevych of Texas A&M University. This conference was held in honor of Rostislav Grigorchuk's Seventieth birthday in Switzerland. For this, he received a $20,700 conference grant from the NSF.

He was also a co-organizer (with **N. Jonoska**, above) of the joint conference on *Discrete and Topological Models in Molecular Biology* (DTMB 2022) and *Developments in Language Theory* (DLT 2022) at USF last May.

Kaiqi Xiong received $149,940 from the NSF for *Building Cloud-Based Experiential Blockchain Learning Modules for Cybersecurity Education* for cybersecurity education and hands-on lab experience. He also received a $15,000 grant from the Virginia Polytechnic Institute for developing a Global Information System-based digital platform for *Studies on How Intra- and Inter-Institutional Partnerships Can Be Designed, Built, and Sustained to Systematically Support Low-Income Engineering and Computer Science/Computing Student Success*. This is part of an effort to ensure food security, equity, and sustainability, as well as designing blockchain-based cybersecurity experiments for research and STEM education.