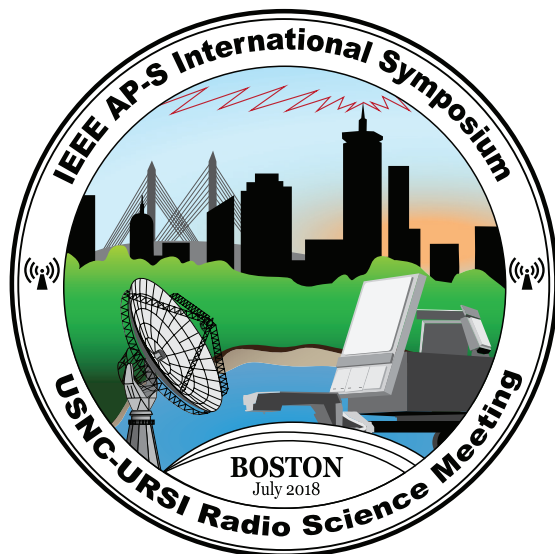


**2018 IEEE
Symposium on Antennas and Propagation
and
USNC-URSI Radio Science Meeting**

July 8–13, 2018 · Boston, Massachusetts



**Awards Presentation
July 11, 2018**



IEEE



Gold Patron



Altair

Program

6:30 PM	IEEE Awards Presentation Introductions/Welcome: Weng Cho Chew, AP-S President Koichi Ito, AP-S President-Elect Kathleen Melde, Awards Committee Chair
6:35 PM	IEEE Fellows
6:40 PM	AP-S Field Awards
6:50 PM	Paper Awards
7:00 PM	AP Society Recognition
7:05 PM	AP-S Outstanding Chapter Award <i>Presenter Ajay K. Poddar</i>
7:10 PM	Raj Mittra Travel Grant Awards <i>Presenter Raj Mittra</i>
7:12 PM	Student Paper Awards <i>Presenter Jennifer Bernhard</i>
7:15 PM	AP-S Student Design Contest <i>Presenter Sean Hum</i>
7:20 PM	TICRA Foundation Travel Grants <i>Presenter Oscar Borries</i>
7:25 PM	Concluding Remarks

2018 IEEE AP-S Fellows

Matteo Albani

for contributions to the uniform geometrical theory of diffraction

Yongxin Guo

for contributions to wideband printed antennas

Jeffrey Herd

for leadership in the development of low-cost phased array technology

Yilong Lu

for contributions to array antenna techniques in radar systems

Andrea Massa

for contributions to phased arrays and electromagnetic inverse scattering

Konstantina Nikita

for contributions to bioelectromagnetics and implantable antennas for medical applications

CJ Reddy

for leadership in simulation methods for antenna placement and co-site analysis

Ronan Sauleau

for contributions to lens and millimeter wave antennas

Daniel Weile

for contributions to computational electromagnetics

Hao Xin

for contributions to electromagnetic metamaterials and 3D printing of metamaterial structures

2018 IEEE Fellows Evaluated by other IEEE Societies

Massimo Franceschetti

for contributions to random wireless networks

Charles Bunting

for educational contributions to electromagnetic compatibility and reverberation chambers

Vicente Boria

for contributions to high-power microwave filters and multiplexers

Maurizio Bozzi

for contributions to substrate integrated waveguides and integrated periodic structures

Thomas Weller

for contributions to modeling and design of passive microwave circuits and components

Thomas Zwick

for contributions to millimeter wave transceivers

Antennas and Propagation Society 2018 Field Awards

Distinguished Achievement Award

Lot Shafai

For contributions to singular electromagnetics, Moment Methods, reflector feeds and virtual arrays, wideband antennas, gain enhancement in miniaturized antennas and dielectric film circuits and antennas.



Lotfollah Shafai B.Sc. from University of Tehran in 1963 and M.Sc. and Ph.D., from University of Toronto, in 1966 and 1969. In November 1969, he joined the Department of Electrical and Computer Engineering, University of Manitoba as a Lecturer, Assistant Professor 1970, Associate Professor 1973, Professor 1979, Distinguished Professor 2002, and Distinguished Professor Emeritus 2016. His assistance to industry was instrumental in establishing an Industrial Research Chair in Applied Electromagnetics at the University of

Manitoba in 1989, which he held until July 1994.

In 1986, he established the Symposium on Antenna Technology and Applied Electromagnetics, ANTEM, at the University of Manitoba, which has grown to be the premier Canadian conference in antenna technology and related topics.

He has been the recipient of numerous awards. In 1978, his contribution to the design of the first miniaturized satellite terminal for the Hermes satellite was selected as the Meritorious Industrial Design. In 1984, he received the Professional Engineers Merit Award and in 1985, "The Thinker" Award from Canadian Patents and Development Corporation. From the University of Manitoba, he received the "Research Awards" in 1983, 1987, and 1989, the Outreach Award in 1987 and the Sigma Xi Senior Scientist Award in 1989. In 1990 he received the Maxwell Premium Award from IEE (London) and in 1993 and 1994 the Distinguished Achievement Awards from Corporate Higher Education Forum. In 1998 he received the Winnipeg RH Institute Foundation Medal for Excellence in Research. In 1999 and 2000 he received the University of Manitoba Research Award. He is a life Fellow of IEEE and a life Fellow of The Royal Society of Canada. He was a recipient of the IEEE Third Millennium Medal in 2000 and in 2002 was elected a Fellow of The Canadian Academy of Engineering and Distinguished Professor at The University of Manitoba. In 2003 he received an IEEE Canada "Reginald A. Fessenden Medal" for "Outstanding Contributions to Telecommunications and Satellite Communications", and a Natural Sciences and Engineering Research Council (NSERC) Synergy Award for "Development of Advanced Satellite and Wireless Antennas". He held a Canada Research Chair 2001-2016 in Applied Electromagnetics and was the International Chair of Commission B of the International Union of Radio Science (URSI) for 2005-2008. In 2009 he was elected a Fellow of the Engineering Institute of Canada, and was the recipient of IEEE Chen-To-Tai Distinguished Educator Award. In 2011 he received the Killam Prize in Engineering from The Canada Council, for his "outstanding Canadian career achievements in engineering, and his research on antennas". In 2013 he received The "John Kraus antenna Award" from IEEE Antennas and Propagation Society "For contributions to the design and understanding of small high efficiency feeds and terminals, wideband planar antennas, low loss conductors, and virtual array antennas". In 2014 he was the recipient of Edward E. Altschuler Best paper Prize from IEEE APS Magazine, and in 2016 the best paper award from IEEE ANTEM. In 2017, International Union of Radio Science, URSI, awarded him the Booker Gold Medal "For outstanding contributions to antenna miniaturization by electromagnetics and numerical techniques, small satellite terminals, planar antennas, invention of virtual reflectors, low loss engineered conductors and dielectric film components and antennas".

Chen-To Tai Distinguished Educator Award

Stuart A. Long

For his commitment to electromagnetics education through teaching, research, and the development of programs to attract students into electromagnetics and engineering



Stuart A. Long completed his secondary education in Snyder, Texas. He was granted the B.A. (magna cum laude) and M.E.E. degrees in Electrical Engineering from Rice University, Houston, Texas, in 1967 and 1968, respectively, and the Ph.D. degree in Applied Physics from Harvard University, Cambridge, Massachusetts, in 1974.

He was previously employed at General Dynamics and the Los Alamos Scientific Laboratories before joining the faculty at the University of Houston, where he has served as Chairman of the Department of Electrical and Computer Engineering, Associate Dean of the College of Engineering, Interim Dean of the Honors College, and Interim Vice Chancellor/Vice President for Research. He presently is a Professor of Electrical and Computer Engineering and Associate Dean of Undergraduate Research and the Honors College.

His research interests are generally in applied electromagnetics, and more specifically in microstrip and dielectric resonator antennas. Dr. Long has also developed programs designed to increase graduates in engineering, including ones which bring high school girls to campus, give high school teachers research experience, involve undergraduates in research activities, place PhD students into local high school science classes, form a community for female engineering students, and aid in the retention of current students.

Dr. Long was elected to the AdCom of the IEEE Antennas and Propagation Society (AP-S) for two terms, was general chair of the 1983 IEEE AP-S/URSI Symposium in Houston, was President of AP-S, and has served as the National Meetings Coordinator for AP-S. He also served on the IEEE Technical Activities Board, Publications Activities Board, Spectrum Editorial Board, IEEE Fellow Committee, Educational Activities Board, and Audit Committee, and served on the Board of Directors of the IEEE as Director of Division IV.

At the University of Houston, Dr. Long was the recipient of the University Teaching Excellence Award, the Engineering Alumni Association's Distinguished Faculty Award, the Engineering Senior Research Award, the University of Houston Alumni Organization Outstanding Faculty Award, IEEE Region 5 Educator of the Year award, and received the top career award given by the College, the Fluor Daniel Award. He was named as the first recipient of the University of Houston Career Teaching Excellence Award, and received the Esther Farfel Award, the highest faculty award given at the University of Houston.

Dr. Long is a member of Phi Beta Kappa, Tau Beta Pi, and Commission B of URSI, and is a Fellow of the IEEE, and previously served as an AP-S Distinguished Lecturer. He was awarded the IEEE Millennium Medal, the IEEE Antennas and Propagation Society Outstanding Service Award, the IEEE AP-S John Kraus Antenna Award, and the IEEE AP-S Chen-To Tai Distinguished Educator Award.

John Kraus Antenna Award

W. D. Burnside

For the design and development of compact test range reflectors with blended rolled edges.



W. D. Burnside (M'68-F'85) received the BEE and Ms.C. degree in 1968., and the Ph.D. degree in electrical engineering from The Ohio State University, Columbus Ohio in 1972. He was a Professor with the electrical and computer engineering department from 1985 until 2002. He was Director of the OSU ElectroScience Laboratory from 1995-2002. He is currently a Professor Emeritus at OSU.

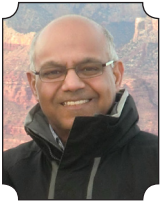
Professor Burnside developed many complex radar and measurement systems that have been used by the US military and NASA, which resulted in a NASA Distinguished Public Service Award which is the highest award given by NASA to a non-employee. He created solutions that led to the final development of the stealth system, and developed the complete concealment system used throughout the US to hide wireless systems within sensitive urban environments. Today, they are the dominant concealment solution in the US. He also developed the complete Wildblue ground terminal antenna system for satellite-based high-speed Internet service for users unable to get cable service. He created low-cost, high performance RFID item-level antennas and reader subsystems that are unique in the world.

His awards include the Honorary Ph.D., University of Pretoria, South Africa 2000, NASA's Distinguished Public Service Medal in 1999, the Distinguished Scholar Award from The Ohio State University in 1997, the AMTA Distinguished Achievement Award in 1996, the Harrison Award from The Ohio State University College of Engineering in 1980, the H.A. Wheeler Application Prize Paper Award of 1991, the IEEE/AP-S Best Paper of 1980, and the IEEE/AP-S: R.W.P. King Award of 1975.

John Kraus Antenna Award

I. J. Gupta

For the design and development of compact test range reflectors with blended rolled edges.



Inder J. Gupta (M'82-F'00) received B.Sc. (Eng) degree in electronics and electrical communication from Punjab Engineering College, Chandigarh, India in 1975, M. Tech. degree in electrical engineering from Indian Institute of Technology, Kanpur, India in 1977 and Ph.D. degree in electrical engineering from The Ohio State University, Columbus, Ohio in 1982.

Since 1982 he has been with the electrical and computer engineering department of The Ohio State University, Columbus, Ohio. Currently, he holds the title of Professor Emeritus and is actively pursuing his research interest at the ElectroScience Laboratory. His research interests includes electromagnetic measurements and scattering, satellite navigation, adaptive antennas, array signal processing and radar imaging. He has published more than fifty refereed journal articles and more than hundred conference papers and two book chapters.

Prof. Gupta is a Fellow of the Institute of Navigation (ION) and Edmond S. Gillespie Fellow of the Antenna Measurement Techniques Association (AMTA). He is the recipient of IEEE Antennas and Propagation Society's 1991 H. A. Wheeler Applications Prize Paper. In 2007, he was awarded the Distinguish Achievement Award by AMTA. He is also the recipient of The Ohio State University College of Engineering Lumley Research Award for 1991, 1998, 2005 and 2012. In January 2016, he was presented with the ION's 2015 Captain Weems Award for his continuing contributions to the art and science of navigation. Most recently, he received The Ohio State University ElectroScience Laboratory George Sinclair Award for his lifelong distinguished technical contributions and service to the ElectroScience Laboratory.

Lot Shafai Mid-Career Distinguished Achievement Award

Diane Titz

For her contribution to the development of antenna solutions and integration at millimeter wave frequencies through innovative technologies and contributing to the access of young women to careers in STEM.



Diane Titz (M'11-SM'17) received her M.S degree in Telecommunications from the University of Paris-Sud (XI) and the ENS de Cachan, in Paris, France in 2009. She received her PhD in electrical engineering in 2012 from the University of Nice Sophia Antipolis, France, while working at the LEAT and the CREMANT, joint lab between the University of Nice and Orange Labs, France. She is now an associate member of the Polytech'lab at the University of Nice and a full teacher in Physics and Chemistry at the Lycée Jules Ferry, Cannes.

Her research interests include antenna designs, measurements, and passive circuits, especially at millimetre-wave frequencies. She has studied antenna-on-chip and antenna-in-package design and characterization at 60 and up to 120 GHz. Her research also deals with the use of dielectric lenses and high gain array antennas for mm-wave communications to address backhaul applications, especially aiming at the development of an innovative solution leveraging 3D printing technology. While still working on 60 and 120 GHz problems, she is now moving to higher frequencies to be able to address tomorrow's challenges and considering electro-optics and plastic waveguides for high data rate communications.

She has authored or co-authored 2 book chapters, more than 20 publications in journals and 50 publications in international conferences. She serves as an associate editor for the IEEE Antennas and Wireless Propagation Letters. She is a member of the editorial board of the Radioengineering Journal. She is a reviewer for the IEEE Transactions on Antennas and Propagation, IEEE Antennas and Wireless Propagation Letters, IEEE Transactions on Microwave Theory and Techniques and several international conferences. She has been in the 2017 European Conference on Antennas and Propagation local organising team and a TPC member of the 2017 and 2015 European Conference on Antennas and Propagation. She has participated to the European COST (ASSIST and VISTA) actions and the French-Singapourian Merlion Project with NTU.

She was the recipient of the APWC 2014 Young Scientific Best Paper Award, ISSCC IEEE Jack Kilby Award 2013 and LAPC 2012 Best Paper Award.

Harrington-Mitra Award in Computational Electromagnetics

Qing Huo Liu

For pioneering contributions to spectral and multiscale methods in computational electromagnetics, and to inverse scattering and imaging of complex media.



Qing Huo Liu (S'88-M'89-SM'94-F'05) received his B.S. and M.S. degrees in physics from Xiamen University, China, and Ph.D. degree in electrical engineering from the University of Illinois at Urbana-Champaign.

His research interests include computational electromagnetics and acoustics, inverse problems, and their application in nanophotonics, geophysics, biomedical imaging, and electronic packaging. He has published over 450 papers in refereed journals and 550 papers in conference proceedings. He was with the Electromagnetics Laboratory at the University of Illinois at Urbana-Champaign as a Research Assistant from September 1986 to December 1988, and as a Postdoctoral Research Associate from January 1989 to February 1990. He was a Research Scientist and Program Leader with Schlumberger-Doll Research, Ridgefield, CT from 1990 to 1995. From 1996 to May 1999 he was an Associate Professor with New Mexico State University. Since June 1999 he has been with Duke University where he is now a Professor of Electrical and Computer Engineering.

Dr. Liu is a Fellow of the IEEE, the Acoustical Society of America, the Electromagnetics Academy, and the Optical Society of America. Currently he serves as the founding Editor-in-Chief of the new IEEE Journal on Multiscale and Multiphysics Computational Techniques. He received the 1996 Presidential Early Career Award for Scientists and Engineers (PECASE) from the White House, the 1996 Early Career Research Award from the Environmental Protection Agency, and the 1997 CAREER Award from the National Science Foundation. He served as an IEEE Antennas and Propagation Society Distinguished Lecturer for 2014-2016. He received the 2017 Technical Achievement Award and the 2018 Computational Electromagnetics Award from the Applied Computational Electromagnetics Society.

Donald G. Dudley, Jr. Undergraduate Teaching Award

Soo Yong (Grace) Lim

For modernizing the teaching of electromagnetics and for innovating its relevant curriculum design



Soo Yong (Grace) Lim received the BEng(Hons) degree in electronics majoring in telecommunications from Multimedia University, Malaysia, in 2003 and the Ph.D. degree in electrical engineering from the University of Hawaii at Manoa, USA, in 2010. She is currently an assistant professor with the Department of Electrical and Electronic Engineering, University of Nottingham Malaysia Campus. Prior to joining the University of Nottingham in January 2014, she was with the Centre for Applied Electromagnetic, Multimedia University from 2004 to 2006, the Hawaii Center for Advanced Communications (HCAC) from 2007 to 2010, and Sunway University from 2011 to 2013. Her research interests for the past decade have revolved primarily around radio propagation measurement and modeling in wireless communication environments. She adopts the fundamental, physics-based, and empirical approach to modeling random electromagnetic waves in special and not-well-explored wireless propagation environments such as indoor stairwells, the outskirts of periodic building façade, open-trench drains in Southeast Asia, and more recently, caves in Malaysia. All these findings are expected to collectively contribute towards accurate planning and implementation of wireless communications systems.

Dr. Lim is a fellow of the Higher Education Academy (HEA, UK), a senior member of the IEEE, and a registered professional engineer both with the Boards of Engineers Malaysia (BEM) and with the Institution of Engineers Malaysia (IEM). She has served the IEEE Antennas and Propagation Society as a member of the Education Committee since 2011 and is currently an associate editor of the *Computer Applications in Engineering Education*, published by John Wiley and Sons. She received the Research Award Certificate (Bronze) from the Faculty of Engineering, University of Nottingham Malaysia Campus in December 2017. In 2012, she won the Award for Achievement in Research for Early Career Researchers, Sunway University; and a bronze medal at the Malaysia Technology Expo, awarded by the Malaysian Association of Research Scientists.

Antennas and Propagation Society 2018 Best Paper Awards

SERGEI A. SCHELKUNOFF TRANSACTIONS PRIZE PAPER AWARD

Han Guo, Yang Liu, Jun Hu, and Eric Michielssen

"A Butterfly-Based Direct Integral-Equation Solver Using Hierarchical LU Factorization for Analyzing Scattering From Electrically Large Conducting Objects" IEEE TAP, vol. 65, no. 9, 4742-4750, September 2017

HAROLD A. WHEELER APPLICATIONS PRIZE PAPER AWARD

Ding Nie and Bertrand M. Hochwald

"Bandwidth Analysis of Multiport Radio Frequency Systems—Part I"
IEEE TAP, vol. 65, no. 3, 1081-1092, March 2017

R. W. P. KING PAPER AWARD

Matan Leibovich and Ehud Heyman

"Beam Summation Theory for Waves in Fluctuating Media. Part I: The Beam Frame and the Beam-Domain Scattering Matrix"
IEEE TAP, vol. 65, no. 10, 5431-5442, October 2017

PIERGIORGIO L. E. USLENGHI LETTERS PRIZE PAPER AWARD

Byungje Lee and Yonghyun Yoon

"Low-Profile, Low-Cost, Broadband Millimeter-Wave Antenna Array for High-Data-Rate WPAN Systems"
IEEE AWPL, vol. 16, 1957-1960, 2017

EDWARD E. ALTSCHULER AP-S MAGAZINE PRIZE PAPER AWARD

Chengjun Zou, Withawat Withayachumnankul, Madhu Bhaskaran,
Sharath Sriram, and Christophe Fumeaux

"Dielectric Resonator Nanoantennas: A Review of the Theoretical Background, Design Examples, Prospects, and Challenges"
IEEE Antennas Propagat. Magazine, 30-42, December 2017

2018 Society Recognitions

2017 President

Ahmed Kishk

Outgoing ADCOM

Trevor S. Bird (2013 President)

Christophe Caloz

Jamesina Simpson

Mahta Moghaddam

Karu Esselle

2018 Symposium General Chairs

Michael Shields

Steven R. Best

2018 Technical Program Chairs

Alan Fenn

Wajih Elsallal

Antennas and Propagation Society Volunteers Completing Their Terms

AP-S Awards Committee Chair

Madgy Iskander

Distinguished Lecturer Program Chair

Peter de Maagt

Meetings Committee Chair

Dave Michelson

Nominations Committee Chair

Michael Jensen

Fellow Awards Committee Members Completing Their Terms

Arun Bhattacharyya

Chalmers Butler

Chi Hou Chan

Raphael Kastner

Kathleen L. Melde

Magdalena Salazar Palma

Sudhakar Rao

Daniel Stancil

Lei Zhu

Leo Kempel

Steve Schneider

Retiring Transactions Associate Editors

Filiberto Bilotti

Levent Gurel

Claire Migliaccio

Retiring AWPL Associate Editors

William Scanlon

Hao Xin

Max Ammann

Fellows Committee Chair

Randy Haupt

Field Awards Chair

Christian Pichot

Education Committee Co-Chair

David Kelley

Retiring Field Awards Committee Members

Parveen Wahid

Andrea Alù

Jaideva C. Goswami

George Hanson

Christophe Caloz

Ehud Heyman

Luis Jofre

Magdalena Salazar Palma

Flavio Hasselmann

Zhang Yue Ping

Kin-Lu Wong

Retiring Paper Awards Committee Members

D. C. Chang

Qiang Chen

Qing-Xin Chu

Seong Ook Park

Goutam Chattopadhyay

Sadasiva M. Rao

Piergiorgio L. E. Uslenghi

Amir Boag

Gaetano Marrocco

Ed Rothwell

Dan Weile

2018 Raj Mittra Travel Grant Award

Dr. Pai-Yen Chen, Associate Professor

Department of Electrical and Computer Engineering, University of Illinois at Chicago

2018 Outstanding Chapter Award

IEEE Kerala AP-S Chapter

Chair-Chinmoy Saha

Past Chair- Aanandan Chandroth Karuvandy

Vice Chair- Abdullah Parambil

Secretary- Deepti D. Krishna

2018 Student Paper Competition Finalists

Mahdiar Sadeghi and Carey Rappaport, Northeastern University, United States

Mohammad Reza Rahimi, Concorida University, Canada; Nima Bayat-Makou, Polytechnique Montreal-University of Montréal, Canada; Ahmed A. Kishk, Concorida University, Canada

Prathap Valale Prasannakumar, Mohamed Elmansouri, Dejan Filipovic, University of Colorado, Boulder, United States

Hoyeong Kwon, Andrea Alù, Dimitrios Sounas, University of Texas at Austin, United States

Changlong Qi, Yuehui Cui, RongLin Li, South China University of Technology, China

Guillaume Lavigne, Christophe Caloz, Polytechnique Montreal, Canada

Mirhamed Mirmozafari, Shahrokh Saeedi, Guifu Zhang, University of Oklahoma, United States

Grzegorz Wolosinski, Vincent Fusco, Queen's University Belfast, United Kingdom; Pawel Rulikowski, Nokia Bell Labs, Ireland

Christopher Merola, Marinos Vouvakis, University of Massachusetts, United States

Simon Adrian, Technical University of Munich, Germany; Francesco Andriulli, Politecnico di Torino, Italy; Thomas Eibert, Technical University of Munich, Germany

Alex Haufler, John Booske, Susan Hagness, University of Wisconsin-Madison, United States; Benjamin Tilberg, Ocean Spray, United States

Brock DeLong, Asimina Kiourti, The Ohio State University, United States; John Volakis, Florida International University, United States

Junyi Huang, Xun Gong, University of Central Florida, United States

2018 Student Design Contest Finalists

University of Alabama Magnetics & Antennas Team, USA

Hoyun Won, Katelyn Isbell, Leo Vanderburgh, and Jonathan Platt

Advisor: Yang-Ki Hong

DUTH Radiolocation Team, Democritus University of Thrace, Greece

Anastasios Koutinos, Micheal Koutsidis, Antigoni Kyriakou, Vasiliki Patika, and Christofer Sakellaris

Advisor: George Kyriacou

Michigan State University, USA

William Stevers, Anton Schlegel, Justin Opperman, and Pratik Chatterjee

Advisor: Jeffrey Nanzer

Polarization Bears, Colorado School of Mines, USA

Rob D. Jones, Joseph E. Diener, Easton Bornemeier, Josh Kast, and Allee Zarrini

Advisor: Atef Elsherbeni

RFbusters, University of Patras, Greece

Chassis Christos, Evangellou Georgios, Fokaeos Maria, and Kaliva Styliani

Advisor: Stavros Koulouridis

TripleT, University of Navarra, Spain

Fátima Villa, Iñigo Cortés, Álvaro Urain, Iñigo Barasoain and Álvaro Momblán

Advisor: Daniel Valderas

2018 TICRA Foundation Travel Grants

Jonas Flygare

Maria Kovaleva

Xingqi Zhang

