

The EurAAP Felsen Award

The Felsen Awards were created by the heirs of the late Prof. Leopold B. Felsen (1924-2005). The main purpose was to keep alive Prof. Felsen's memory and scientific legacy, as well as to foster academic excellence in the electromagnetics community. The basic idea was to give recognition to outstanding scientific contributions from early-stage researchers in electrodynamics, with emphasis on wave interactions with complex environments, a subject that was at the core of Prof. Felsen's research.

Originally, several Felsen Awards were created, targeting national communities and disseminated across academic institutions and universities connected with former collaborators and students of Prof. Felsen. In particular, the Leopold B. Felsen Award for Excellence in Electrodynamics was jointly established by the University of Siena (Prof. Stefano Maci) and the University of Sannio (Prof. Vincenzo Galdi). It was funded through a donation from Prof. Felsen's children, Michael and Judy Felsen, in fulfillment of the last wishes of their father. In its sole edition in 2008, this award was given to Dr. Andrea Alù (University of Pennsylvania, USA) and Dr. Guido Valerio (University of Rome "Sapienza," Italy).

However, it was soon noted that the pool of candidates for this award was too small, and the need to enlarge its range and scope quickly arose. Profs. Galdi and Maci found that the European Association of Antennas and Propagation (EurAAP), creator and owner of the annual European Conference on Antennas and Propagation (EuCAP), could provide the perfect framework for a better visibility of the award within the electromagnetics, antenna, and propagation communities. They generously considered the possibility of transforming the Siena and Sannio Felsen Award by upgrading it to a global EurAAP Felsen Award, to be connected with the EuCAP conferences. At the beginning of 2013, they contacted both the Felsen Charitable Fund and the EurAAP Board, informing them about this idea.

After internal discussions on both sides of the Atlantic, a formal contact was finally established in October 2013 between Prof. Juan R. Mosig, then Chair of the EurAAP Board, and Michael Felsen, in charge of the Felsen Charitable Fund. Upon this first encounter, everything went on steadily, the process being only slowed down by the unavoidable legal provisions to assign an award financed by a USA trust to a European association. The new EurAAP Felsen Award, endowed with a generous yearly prize of USD \$5000, was then created and entrusted to an award jury formed of Profs. Vincenzo Galdi (University of Sannio, Italy); Ehud Heyman (Tel Aviv University, Israel); Raj Mittra, (University of Central Florida); Juan R. Mosig (EPFL, Switzerland); and Werner Wiesbeck (Karlsruhe Institute of Technology, Germany).

The first EurAAP Felsen Award was delivered during the EuCAP 2015 conference in Lisbon, Portugal, and awarded to Prof. Francesco Andriulli (Telecom Bretagne/Institut Mines-Telecom, France). Since then, the Felsen Award has been given every year during the EuCAP conference. The complete list of awardees is:

2015: Francesco Andriulli (Telecom Bretagne/Institut Mines-Telecom, France)

2016: Yakir Hadad (University of Texas, USA)

2017: Juan Sebastian Gomez Diaz (University of California, Davis, USA)

2018: *ex aequo*, Giorgio Carluccio (Delft University of Technology, The Netherlands) and Özgür Ergül (Middle East Technical University, Turkey)

2019: Francesco Monticone (Cornell University, USA)



Figure 1. The 2019 EurAAP Felsen Award ceremony (l-r): C. Mangenot, EurAAP Chair; Francesco Monticone, award winner; and Michael Felsen.



Figure 2. Michael Felsen's speech during the 2019 EurAAP Felsen Award ceremony.



Figure 3. The EuCAP 2019 conference dinner, the perfect setting for the EurAAP Felsen Award ceremony.

The 2019 Award, presented during the EuCAP 2019 conference in Krakow, Poland, was particularly eventful. For the first time, Michael Felsen was able to attend the ceremony, with his wife, and personally present the award. In his speech, Prof. Felsen's son expressed his pleasure to be in Krakow, and his pride at seeing the Felsen Award fully consolidated as one of the most prestigious prizes in our community. With moving words, he told us of the connections of his family with Poland, where his grandfather, Markus Felsen, was born in 1884 in the town of Przemysl, a few hours southeast of Krakow, on the border with Ukraine.

Prof. Felsen also reminded us of how his father made it alone in June 1939, at age 15, from Germany to England, and then in 1940 to the USA, where "he finally settled, obtained his undergraduate and graduate degrees, had a family, and became the distinguished professor we remember this evening with this award." Prof. Michael Felsen went on, disclosing to the ceremony attendees the last utterances of Prof. Leopold Felsen on his deathbed:

We were discussing setting up a few awards in his name, like this one. He said they should be for excellence in electromagnetics. Then he closed his eyes, and we thought he had uttered his last words. But no. He opened his eyes one last time and said: "Not electromagnetics. Electrodynamics." Those were his last words. I leave it to you all, the experts in this field, to interpret his meaning.



Figure 4. (l-r) Juan Mosig, Tolle Felsen, Cyril Manenot, Michael Felsen, and Vincenzo Galdi at the EuCAP 2019 conference dinner.

Michael Felsen also reminded us that his father loved to "play with words." He read us one of his father's last poems, called "Evanescent Professors," composed in 2005, at age 81. Its last lines have now become a well-known saying in our community:

For those of us who deal with Waves,
We do not fade, we Evanesce.

He concluded with some words for the awardee, Francesco Monticone, stating that:

My father, Leo Felsen, has passed the torch to you, Professor Monticone, and to all of you. I know he is with you in spirit, here in the Poland of his ancestors, urging you all to "make waves about waves," as he was pleased to think he had made over the course of his career.

The next 2020 EurAAP Felsen Award will be delivered in Copenhagen, Denmark, during the EuCAP2020 conference (March 15-20, 2020). Information and application forms for the 2020 edition of the award are available in the link <http://www.euraap.org/publications-and-news/EurAAP-Awards/EurAAP-Awards-Description>. Potential candidates, nominators, and endorsers are strongly encouraged to apply before the deadline of **January 31, 2020**.

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