



2021 Bertrand Russell Prize

Michel Waldschmidt was awarded the 2021 Bertrand Russell Prize at the Annual Meeting of the AMS, held virtually January 6–9, 2021.



Michel Waldschmidt

Citation

The 2021 Bertrand Russell Prize is awarded to Michel Waldschmidt in recognition of his outstanding contribution to graduate schools and mathematical research in developing countries in all continents and of his sustained commitment to building bridges between mathematical communities around the world. Throughout his career, Waldschmidt has

worked tirelessly to [aid] the development of graduate schools in tens of countries, both through lecturing and on advisory committees. Waldschmidt is a world expert in transcendental number theory and Diophantine approximation.

The Centre International de Mathématiques Pures et Appliquées (CIMPA), founded in France in 1978, is a nonprofit organization that promotes research in mathematics in developing countries. Located in Nice, it is a UNESCO Category 2 center. It organizes schools, courses, and funds fellowships for young researchers. This is exactly the mission to which Waldschmidt devoted an impressive portion of his time and professional life. Waldschmidt is an inspiring lecturer, and he mixes well with students and researchers wherever he goes. He understands very well the daily problems faced by researchers in developing countries and is able to deal with delicate situations in a positive and human way. Waldschmidt is very helpful and very dedicated. He is able to push and help local mathematical communities improve their research environment. As an example, he played an important role in making the Institut de Mathématiques et de Sciences Physiques (IMSP) in Benin an Emerging Regional Centre of Excellence (ERCE).

The endless list of countries where Michel Waldschmidt gave service in the form of courses, series of lectures, organization of events, and work on advisory committees is truly impressive and the best testimony of his dedication:

- Africa: Algeria, Benin, Cabo Verde, Congo, Ethiopia, Ghana, Ivory Coast, Kenya, Mali, Mauritania, Morocco, Senegal, South Africa
- South America: Brazil
- Asia: Bangladesh, Bhutan, Cambodia, India, Indonesia, Iran, Iraq, Korea, Laos, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Taiwan, Thailand, Vietnam
- Middle East: Saudi Arabia, Syria, Turkey
- Oceania: Papua New Guinea

Biographical Sketch

Michel Waldschmidt was born in 1946 in Nancy, France. He was Assistant in Bordeaux from 1968 until 1972, when he submitted his doctoral dissertation under the supervision of Jean Fresnel. He was appointed at Université Paris Sud for the academic year 1972–1973, and he taught at Université Pierre et Marie Curie (Paris-VI, now Sorbonne University) from 1972 until 2012. He gave the Cours Peccot at the Collège de France (1976–1977). He was awarded the silver medal from Centre National de la Recherche Scientifique (CNRS) in 1978, the Marquet Prize of the French Academy of Science in 1980, and the 1986 Distinguished Award from the Hardy–Ramanujan Society, of which he has been an honorary fellow since 2006. He served as President of the Société Mathématique de France from 2001 to 2004 and as Deputy President of CIMPA from 2005 to 2009. He has been a member of the Committee for Developing Countries of the European Mathematical Society since 2011 and served as chair in 2013–2015. He is currently a member of the Commission for Developing Countries of the International Mathematical Union and chair of the Committee for Graduate Research Assistantships in Developing Countries

(GRAID). He has published more than 190 research papers and has advised twenty-one PhD students. He is presently a member of the Commission of Developing Countries of the International Mathematical Union. He is Doctor Honoris Causa from Ottawa University.

Response from Michel Waldschmidt

To succeed Christiane Rousseau, who received the inaugural 2018 Bertrand Russell Prize of the AMS, is an honor and a privilege for me. Among the various ways which are recognized with this prize are our understanding of climate change, which was the topic of the first prize related with Mathematics of Planet Earth, and education in developing countries, which is the topic of the second one. I am very grateful to the AMS for attracting attention to this issue.

As a member of the CIMPA, of the EMS CDC (Committee for Developing Countries of the European Mathematical Society), and of the IMU CDC (Commission for Developing Countries of the International Mathematical Union), I meet many colleagues who are committed to the improvement of mathematics in the least developed regions of the world. This prize is an encouragement for all of us to pursue.

There were mathematicians in ancient civilizations in many places. There are talents all over the world. It is unfair that, because of the location of their birth, so many bright young people are not able to develop their skills. Even if programs like the IMU Program for Graduate Research Assistantships in Developing Countries (GRAID) may be a drop of water to put out the fire, like in the Legend of the Hummingbird, let us do our bit.

About the Prize

The Bertrand Russell Prize of the AMS was established in 2016 by Thomas Hales. The prize looks beyond the confines of the profession to research or service contributions of mathematicians or related professionals to promoting good in the world. It recognizes the various ways that mathematics furthers fundamental human values. Mathematical contributions that further world health, our understanding of climate change, digital privacy, or education in developing countries are some examples of the type of work that might be considered for the prize.

The members of the committee to select the winner of the Bertrand Russell Prize for 2021 were:

- Melvyn B. Nathanson
- Christiane Rousseau, Chair
- David A. Vogan, Jr.

The inaugural Bertrand Russell Prize was awarded in 2018 to Christiane Rousseau.

Credits

Photo of Michel Waldschmidt is courtesy of Michel Waldschmidt.