

Margaret Wertheim

Brief Bio - 2017

Margaret Wertheim is an internationally noted writer, artist and curator whose work focuses on relations between science and the wider cultural landscape. She is the author of six books, including *Pythagoras Trousers*, an acclaimed history of physics; *The Pearly Gates of Cyberspace*, a ground-breaking exploration of Western concepts of space from Dante to the Internet; and *Physics on the Fringe*, a sociological study of “outsider science” – a term she coined. She has written for the *New York Times*, *Los Angeles Times*, *Guardian*, *TLS*, *New Scientist*, *Washington Post*, *Aeon*, and many others, and is a contributing editor at *Cabinet*, the renowned arts & culture quarterly.

Wertheim is the founder of the Institute For Figuring, a Los Angeles-based practice created with her twin-sister Christine Wertheim that is devoted to “the aesthetic and poetic dimensions of science and mathematics.” www.theiff.org Through the IFF, she has designed art & science exhibits for galleries and museums worldwide including the Hayward Gallery (London), Art Center College of Design (Pasadena), Santa Monica Museum of Art (Los Angeles), and Mass MoCA (MA, USA). At the core of this practice is the concept of material play and a belief that abstract ideas can often be embodied in physical activities. By inviting audiences to *play* with ideas, the IFF offers a radical approach to public science engagement at once intellectually rigorous and aesthetically aware.

Paradigmatic of this generative, interdisciplinary practice is the Wertheim sisters *Crochet Coral Reef*, now the largest participatory art & science endeavor in the world. www.crochetcoralreef.org. Through an unlikely nexus of mathematics, marine biology, handicraft and collaborative art practice, the *Crochet Coral Reef* offers a powerful framework for social and community engagement around the issues of reef degradation and climate change. The project has been exhibited at the Andy Warhol Museum (Pittsburgh), Science Gallery (Dublin), Deutsches Museum (Munich), Museum of Arts and Design (New York), New York University Abu Dhabi (UAE), the Smithsonian’s National Museum of Natural History (Washington D.C.), and elsewhere. Seen by more than two million people, the *Reef* has actively engaged 10,000 participants in a dozen countries, including the USA, UK, Germany, Latvia, Ireland and Australia. Margaret’s **TED** talk on the project has been translated into 22 languages including Arabic and Korean. http://www.ted.com/talks/margaret_wertheim_crochets_the_coral_reef

Throughout her career, Margaret Wertheim has been a pioneer in developing creative strategies for engaging audiences about science and math, particularly women. For ten years in her native Australia she wrote regular science columns for women’s magazines such as *Vogue Australia* and *Australian Elle* – and may be the only journalist to have held such a position. In 1990, for ABC Australia she conceived and wrote a six-part television science series (*Catalyst*) aimed at teenage girls, which won awards around the globe. Her writing is included in *Best American Science Writing* (2003, edited by Oliver Sacks), and *Best*

Australian Science Writing (2014, and 2016). In 2004 she was the US National Science Foundation's Visiting Journalist to Antarctica, from which she wrote a series of articles about women scientists "on the ice" that earned her the 2006 *Print Journalism Award* from the American Institute of Biological Sciences. In 2016, the American Association of Physics Teachers gave her their annual award for public science communication – the first woman to have been granted this honor in 10 years.

In 2012 Wertheim served as the inaugural *Discovery Fellow* at the University of Southern California where she spearheaded a campus-wide project to build a giant model of a fractal out of 50,000 business cards, and in 2015 was a *Vice Chancellor's Fellow* at the University of Melbourne. As a speaker, Wertheim has lectured at more than 150 universities, colleges, museums and conferences, including Harvard, Tufts, Rutgers, University of Cape Town, University of Oslo, University of Sydney, Princeton Theological Seminary, Walker Arts Center (MN, USA), National Gallery of Victoria (Melbourne, Australia), and the Hayward Gallery (London). She has been a keynote speaker at the Aspen Design Conference, the Australian Institute of Architects conference, and the *Topology Series* at the Tate Modern.

Margaret has been awarded grants from the Andy Warhol Foundation, Annenberg Foundation, Templeton Foundation, Orphiflamme Foundation, Metabolic Studio and others; and from the UK Crafts Council and Australia Council. She has worked professionally on all seven continents and stood on the South Pole.