Ken Ono Named New Pólya Lecturer

Successful mathematicians possess myriad talents, but Ken Ono stands out for his range of accomplishments. Specializing in number theory, the Asa Griggs Candler Professor of Mathematics at Emory University is also a journal editor, member of the U.S. National Committee for Mathematics, a competitive triathlete, and a Hollywood consultant and associate producer. Now Ono can add 2017-2018 George Pólya Lecturer to his achievements.

in 2016. Those chosen have contributed to the public discussion of mathematics, something that Ono actively and creatively accomplishes in his career.

"In a way, I was meant to be a mathematician. Everything about my life has been dictated by the world of mathematics," says Ono. Ono's father is Takashi Ono, a mathematician who emigrated from Japan before working as a professor at the Institute for Advanced Study. Now Ono is well on his way to



Everything about my life has been dictated by the world of mathematics.

The MAA appoints a new Pólya Lecturer every year, whose primary responsibility is presenting talks at MAA section meetings. Each appointee serves a term of two academic years; the first year overlaps with the second year of the previous Pólya Lecturer. The current lecturer, William Dunham (Muhlenberg College), is in the middle of his 2015-2016 term, and Erica Flapan (Pomona College) will begin hers

building his own legacy. In 2013 Ono and his colleagues Michael Griffin and Ole Warnaar made history when they discovered four infinite families of Rogers-Ramanujan identities. Together, they solved a century-old mystery of two famous identities first studied by the Indian mathematician Srinivasa Ramanujan in the early 1900s. What Ono and his colleagues found was the framework that shows how Ramanujan's identities were true—opening up new mathematical territory.

In 2014 he made world news again, this time with John Duncan and Michael Griffin. They proved the Umbral Moonshine conjecture, which extends the Fields Medal work of Berkeley mathematician Richard Borcherds. Their work is now being applied to string theory.

Ono also served as chief mathematical consultant (and associate producer) for *The Man Who Knew Infinity*, a Hollywood film about Ramanujan. Ono is deeply passionate about both Ramanujan's beautiful mathematics and his personal story—a mathematical genius who had little formal training and worked as a clerk in India before traveling to the University of Cambridge to publish his findings.

Ono calls the idea of Ramanujan very important—particularly to mathematics students. "We often live life in a frenetic race, chasing random credentials," he says. "In reality, we should be recognizing and evaluating true achievement."

Ono finds many opportunities to train future mathematicians: he advises nine PhD students and runs a summer research program (REU) on number theory for up to 10 undergraduates. "Talent is often found in unusual or even unforgiving circumstances," he says. "As a professor, it is my job to first recognize that talent and then to nurture it."

Now Ono is looking forward to more opportunities to speak to his peers, and young mathematicians, at section meetings. "I am honored to be named a Pólya Lecturer," he says. His goals for his lectures, he adds, are twofold: to inspire young mathematicians and to continue driving mathematics toward the future.

—Alexandra Branscombe