

# Vesa Julin

Väisälä Prizes are awarded annually to distinguished scientists in mathematics and science who are in the active part of their careers. The prizes are worth 15,000 euros.

Mathematician Vesa Julin earned his Ph.D. in mathematics in 2010. Even before the completion of his dissertation, Julin worked as a visiting researcher at the University of California, Berkeley, and his postdoctoral career continued as a researcher at the University of Naples. Julin worked as a Postdoctoral Researcher funded by the Academy of Finland in 2013–2016 and as an Academy Research Fellow in 2017–2022. Since 2020, Julin has worked as an Assistant Professor in the Department of Mathematics and Statistics at the University of Jyväskylä.

“Chance has played a large part in my career. I had plans to head to Germany after the completion of my dissertation when I happened to see a lecture on isoperimetric inequalities by the Italian mathematician Nicola Fusco. His fierce passion for mathematics and cast-iron profession-

alism made a great impression on me. And as a postdoctoral position happened to be available in Fusco’s research team in Naples, I did not hesitate for a moment”, Julin says.

Vesa Julin’s research project funded by the Academy of Finland pertains to partial differential equations, variational calculus, and geometric measure theory. His research focuses on the existence, regularity, and stability theories. Julin studies geometric equations that can, for example, be used to examine a drop of water in zero gravity. If the drop is not affected by external forces, it remains spherical, but if it is disturbed by an external force, it will begin to vibrate irregularly and may break up into smaller droplets. This is a question of stability that relates to an isoperimetric problem, which could, in addition to mathematics, have applications in material sciences as well, for example.

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ing problems with other scientists is the greatest”, Vesa Julin sums up. “The work is also international. At the moment, my partners in all my projects are located outside of Finland.”

Vesa Julin’s research has achieved substantial international recognition. He has contributed to approximately 30 research

papers, most of which have been published in leading mathematical journals. Julin’s research creates links between mathematical analysis and geometry.

“The Prize gives me confidence to continue my research. I dream of writing the perfect article that would be remembered for years to come.”