Ingrid Daubechies

First Woman to win the William Bentner Prize in Applied Mathematics



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Ingrid Daubechies, born August 17, 1954 in Belgium, started out working in physics, but made significant contributions in mathematics. She is especially known for her work with wavelets and applications to image compression. More recently, she has been using mathematics to analyze artwork. In June of 2018, she became the first woman to win the William Bentner Prize in Applied Mathematics. (https://today.duke.edu/2018/06/duke-professor-wins-100000-prize-applied-mathematics) I heard her give an invited address one year at the Joint Mathematics Meetings. She said that even after she had made important discoveries and was well known for her work with wavelets, she still worried that people would discover that she wasn't as smart as they thought she was. She went on to mention how women often underestimate their mathematical abilities, and that realizing that can be empowering. As a female mathematician, this struck a chord with me and provided encouragement. If a famous mathematician has thoughts about being inadequate similar to my own thoughts, maybe I am more capable than I give myself credit.

Required Reading and Viewing

Ingrid Daubechies, https://mathshistory.st-andrews.ac.uk/Biographies/Daubechies/

• Interview with Ingrid Daubechies, https://youtu.be/-iz4q0n7ZuI

Optional Viewing and Reading

- Ingrid Daubechies, https://en.wikipedia.org/wiki/Ingrid_Daubechies
- https://youtu.be/jrF1SGPyF4g TEDx talk about using math to understand art