



Math for the people, by the people.

Ingrid Daubechies

Canonical name	IngridDaubechies
Date of creation	2013-03-22 16:49:41
Last modified on	2013-03-22 16:49:41
Owner	PrimeFan (13766)
Last modified by	PrimeFan (13766)
Numerical id	7
Author	PrimeFan (13766)
Entry type	Biography
Classification	msc 01A60
Classification	msc 01A61
Classification	msc 01A65

Ingrid Daubechies (1954 -) Belgian mathematician and physicist, best known for Daubechies wavelets used in some image compression schemes.

The daughter of a civil engineer and a criminologist, Ingrid was as a child interested in the mathematics of base 10 representation of numbers and the workings of mechanical devices. After earning a degree in physics from the Vrije Universiteit Brussel, she stayed there teaching and researching until 1984. That year she won the Louis Empain Prize for Physics, a sort of Fields Medal for Belgian physicists.

In 1987, her study of compression prompted her to move to America, specifically to work at the AT & T Bell Labs in New Jersey where she fell in love with mathematician Robert Calderbank. The two married that year and later both wound up teaching at Princeton. In 1994, the American Mathematical Society awarded her the Steele Prize for an expository paper on wavelets. In 1998, Daubechies coauthored with her husband a paper on “Wavelet transforms that map integers to integers” in *Appl. Comput. Harmon. Anal.* **5**, giving her <http://planetmath.org/ErdHosNumberErdős> number 3.

Daubechies has taught at Princeton since 1993.