

**Professor Ingrid Daubechies**  
*Hon DSc (3pm)*

Ingrid Daubechies is the James B Duke Professor of Mathematics at Duke University. Born in Belgium, she gained a PhD in Theoretical Physics in 1980, at the Vrije Universiteit Brussel, where she began her academic career.

In 1987, Ingrid moved to the USA, joining the Mathematical Research Center at AT&T Bell Laboratories as a Researcher and Rutgers University as a Professor of Mathematics. In 1993, she joined the Mathematics Department and the Program in Applied and Computational Mathematics at Princeton University, becoming the first female Professor of Mathematics at Princeton.

Ingrid's career has seen other impressive 'firsts' – she was also the first woman to receive the National Academy of Sciences Award in Mathematics in 2000; and the first woman President of the International Mathematical Union in 2010.

She is best known for her breakthroughs in wavelet research and her contributions to digital signal processing. Some of the wavelet bases she constructed have become commonplace in signal analysis; they, and other computational techniques she developed, have been incorporated into the JPEG2000 standard for image compression. Ingrid has also contributed to other seminal advances in time-frequency analysis.

Ingrid's numerous prizes include two American Mathematical Society Steele Prizes and the Jack S Kilby Signal Processing Medal of the Institute of Electrical and Electronics Engineers. In 2012, she received the Frederic Esser Nemmers Prize in Mathematics, one of the largest monetary awards in the United States for outstanding achievements in mathematics.

In addition to her commitment to educating the next generation of mathematicians, Ingrid continues to break new ground in mathematics research and expand its impact outside of her discipline, focusing on the analysis of signals and inverse problems in a range of settings, with applications ranging from fMRI and geophysics to paleontology and the study of fine art paintings.

296wds

Orator: **Professor Pam Thomas**  
Pro-Vice-Chancellor