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Självständigt arbete i matematik  
Matematiska institutionen  
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## **Karin Gambe: Wavelets - an introduction**

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### **Sammanfattning**

The purpose of the talk will be to give a brief introduction to wavelets and the wavelet transform. The wavelet transform has a lot in common with the windowed Fourier transform but while the Fourier window is rigid the wavelet varies depending on the time/frequency ratio.

In applications wavelets are often used together with a multiresolution analysis (MRA) and it will be shown how a wavelet basis can be constructed by the means of an MRA and examples will be given to show how it helps decomposing signals.