Modern Harmonic Analysis Methods for Advanced Wireless Communications (MOHAWI)

Abstract

Methods of time-frequency analysis, in particular the Gabor transform, are an important tool in signal processing for improved and stable representation of signals. The objective of this project is the application of new mathematical results in time-frequency analysis to the modeling and analysis of wireless communications systems. The expected benefit will be a more efficient energy balance and higher data rates. The concrete applications of the project are expected for the next generation of mobile communication systems that will work in higher frequency bands.

Keywords:

Harmonic Analysis, Gabor Transform, Pseudodifferential Operators,Wireless Communications

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Further links about the involved persons and regarding the project you can find at

https://archiv.wwtf.at/programmes/mathematics/MA04-044