983-94-581 Jelena Kovacevic* (j.kovacevic@ieee.org). Frames in Communications.

Frames have become ubiquitous. They started as a mathematical theory by Duffin and Schaeffer and have since evolved into a state-of-the-art signal processing tool.

Frames have been used in different areas under different guises. In particular, they appear in perfect reconstruction oversampled filter banks, as a tool to fight additive noise as well as provide numerical stability of reconstruction. They have also demonstrated resilience to quantization as well as resilience to coefficient losses in networks.

I will look into frames in communications systems. In particular, I will discuss how frames fit into wireless systems and an interesting connection between CDMA and frames. (Received September 12, 2002)