Signals and Systems

M. Ortigueira

June 7, 2016

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- Schuster Periodogram (1898)
- Wiener (1894 1964) Stochastic Processes, Linear and Nonlinear Systems, Control, Cybernetics, ...

Wiener filter; WienerKhinchin-Einstein theorem, Paley-Winer theorem, Harmonic Analysis

M. Ortigueira (UNINOVA)

 Carson (1915) – Frequency analysis of modulations. Use of LT and FT.

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- Discrete-time Signals and Systems Oppenheim, Kailath, Rabiner, Markel, Gray, ...

• Transforms

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- Filter design

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• Spectral estimation

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- Signal modelling

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- Signal modelling
- Time-frequency analysis Wavelets

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- Image Processing
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- Fuzzy systems

Entropy

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- Time scales

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- Baysian methods

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- Baysian methods
- Quaternions and other geometric methods

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- Irregular sampling

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- Sampling/reconstructing of non-bandlimited signals

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- Time variant and time-space systems

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Thanks!