# Audio- / Videosignalverarbeitung Advanced Digital Signal Processing Digital Signal Processing 2

Additional Task ADSP WS 2012/2013

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### 1. Task

#### Write a scientific report/summary about one of the following topics:

- 1. Quantization (consider quantisation error, quantisation SNR,...)
- 2. Companding
- 3. Max-Lloyd Quantizer
- 4. Vector-Quantizer
- 5. Sampling
- 6. FIR- and IIR-Filter
- 7. Noble Identities
- 8. Polyphase Filter
- 9. Allpass Filter
- 10. Frequenz Warping
- 11. Minimum Phase Filter
- 12. Hilbert Transformation
- 13. Wiener Filter
- 14. Matched Filter

## 2. Rules

- 1. choose one topic for yourself (groupwork is not allowed)
- 2. write at least 2 DIN A4-pages (font size 12pt.)
- 3. follow the scientific citation rules (wikipedia is not a proper source to cite)
- 4. write in english
- 5. upload your report as PDF until the deadline
- 6. name your file like this: NumberTopic\_Lastname\_Firstname
- 7. if there are several identical reports, only the first uploaded one will be graded

### Uploading-**Deadline**:

Wednesday, 23rd January 2013, 9am

