

Quantifying nitrogen oxides and ammonia via frequency modulation in gas sensors

Master Thesis - Mid term seminar

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Outline

Problem recap

- Motivation

- Research Questions

What has been done so far

Caveats

(Dummy) data

Methods

(Preliminary) Results

Real data

What is next

Problem recap

What has been done so far

Caveats

- ▶ Real data not yet available - lab problems
- ▶ Methods used on "dummy" data

(Dummy) data

Methods

1. Linear Regression
2. Principal Component Regression
3. Partial Least Squares Regression
4. Ridge Regression

(Preliminary) Results

Real data

What is next

1. Apply methods to real data
2. Assess results
3. Define what is "good" in "good prediction levels"
4. Look into neural networks alternatives
5. Keep writing!

Thank you!