

# Regression on graph by spectral decomposition

## cut-off and aggregation

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## Introduction

### 1.1 The data

### 1.2 Likelihood



## Bayesian approach with hierarchical sieve prior

### 2.1 Sieve priors

### 2.2 Hierarchical priors



## Frequentist estimation in circular deconvolution

### 3.1 Empirical distribution and projection estimates

#### 3.1.1 Estimating the Fourier coefficients individually

#### 3.1.2 Estimation of the Fourier sequence

#### 3.1.3 Penalized contrast model selection

### 3.2 Aggregation estimator

#### 3.2.1 Estimating the Fourier coefficients individually

#### 3.2.2 Estimating the Fourier sequence





## Generalization of graph regression

### 4.1 Dependent data

#### 4.1.1 Projection estimator and model selection

#### 4.1.2 Aggregation estimator

### 4.2 Partially unknown operator

#### 4.2.1 Projection estimator and model selection

#### 4.2.2 Aggregation estimator