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# **DIW Master Class "High-Frequency Econometrics"**

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#### Outline

# 1. High-Frequency Data

- **1.1.** Introduction
- 1.2. Handling HF Data
- **1.3.** Properties of HF Data
- 1.4. Recent HF Phenomena

#### 2. High-Frequency Based Volatility Estimation

- **2.1.** Introduction
- 2.2. Realized Volatility
- 2.3. Estimating Constant Volatility Under Noise
- **2.4.** Noise-Adjusted Estimators

# 3. High-Frequency Based Covariance Estimation

- 3.1. Realized Covariance
- 3.2. Multivariate Realized Kernels
- 3.3. Modeling Realized Covariances
- 3.4. Portfolio Applications

# 4. Models for High-Frequency Financial Data

- **4.1.** Dynamic Intensity Models
- **4.2.** Multiplicative Error Models
- **4.3.** Models for Limit Order Books

# Literature

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