# Slide 1: Title Slide

## Title: Stock Price Prediction in the Presence of High Volatility, Missing Data, and Extreme Events

### Subtitle: Evaluating the Performance of Different Prediction Models and Data Preparation Techniques

#### Your Name

#### Date

# Slide 2: Introduction

Briefly introduce the topic and its relevance

State the research questions

# Slide 3: Data Preparation

Explain the process of preparing the four versions of the dataset for each time series

* Original data with missing values removed and outliers not identified
* Original data with missing values removed and outliers identified
* Imputed data with outliers not identified
* Imputed data with outliers identified

# Slide 4: Data Resampling

Describe the rationale behind resampling the time series to daily frequency

# Slide 5: Benchmark Model

Explain the random walk simulation as a benchmark for comparison

# Slide 6: Hypotheses

List the different hypotheses to be tested

* H1: ts1 can predict ts1
* H2: ts2 can predict ts2
* H3: ts1 can predict ts2
* H4: ts2 can predict ts1

# Slide 7: Prediction Models

Introduce the chosen prediction models (e.g., ARIMA, GARCH, LSTM, etc.)

Mention that these models will be applied to test the hypotheses on the four versions of the dataset

# Slide 8: Model Evaluation

Describe the evaluation metrics (MSE, MAE, R-squared)

Explain the process of comparing the performance of different models on different dataset versions

Discuss the investigation of the impact of data imputation techniques and outlier detection techniques

# Slide 9: {Insert Results and Graphs}

Show the results of the experiments, including graphs and tables

# Slide 10: Results and Conclusions

Summarize the findings

Highlight the most effective techniques for handling missing data, outliers, and challenges of stock price prediction in the presence of high volatility and extreme events

Provide insights into the relationships between the two time series and their predictability

Discuss the limitations of the study and potential avenues for future research

# Slide 11: Acknowledgments and References

Acknowledge any assistance or resources used in the research

List any references

# Slide 12: Questions

Open the floor for questions