#### **IMPERIAL**

#### SMC-Guided Diffusion for General Optimisation

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# Introduction

#### First Frame

Hello, world! Akyildiz et al. (2020), Anderson (1982), Del Moral (2011), Dou and Song (2023), and Ho et al. (2020)

# Background

#### Annealing

#### **Inverse Problems**

#### **Diffusion Models**

#### Sequential Monte Carlo

# SMCDiffOpt

#### Heuritic Motivation

# Algorithm

# Geometric Interpretation

#### Appyling to Inverse Problems

**Experimental Results** 

# **GMM Experiment**

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# **Branin Experiment**

# **Branin Experiment**

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# Black-Box Experiment

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# Conclusion

#### **Future Work**

#### Final Remarks

Thank you!

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