

## M2 AIC

### TC2: Introduction to Optimization

#### Black-Box Optimization Benchmarking with the COCO platform

-

Multiobjective Optimizer adaptive IBEA ( $\epsilon$ -indicator)



*Group 1:* Martin BAUW, Robin DURAZ, Jiaxin GAO,  
Hao LIU, Luca VEYRON-FORRER

- 1 Introduction
- 2 The algorithm
  - Overview of IBEA
  - Selection and variation
- 3 Our implementation
  - Code structure
  - Improvements regarding the execution speed
- 4 CPU timing and results
  - CPU timing and results
  - Comparision with NSGA 2 and Random Search
- 5 Conclusion
- 6 Bibliography

## Introduction

The algorithm

Our implementation

CPU timing and results

Conclusion

Bibliography

- steps description

# Binary quality indicators

# Mating selection and mutation

# Recombination









# NSGA 2

# Random Search

conclusion sur algo, implémentation, idées d'ouverture ?

# Non-exhaustive bibliography