

## CEC 2017 Competition on Constrained Real-Parameter Optimization

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## ■ Motivation

### ■ IEEE CEC (Congress on Evolutionary Computation)

- One top international conference in the EC field

### ■ Annual optimization competitions

- Compete against other researchers worldwide

### ■ Objective

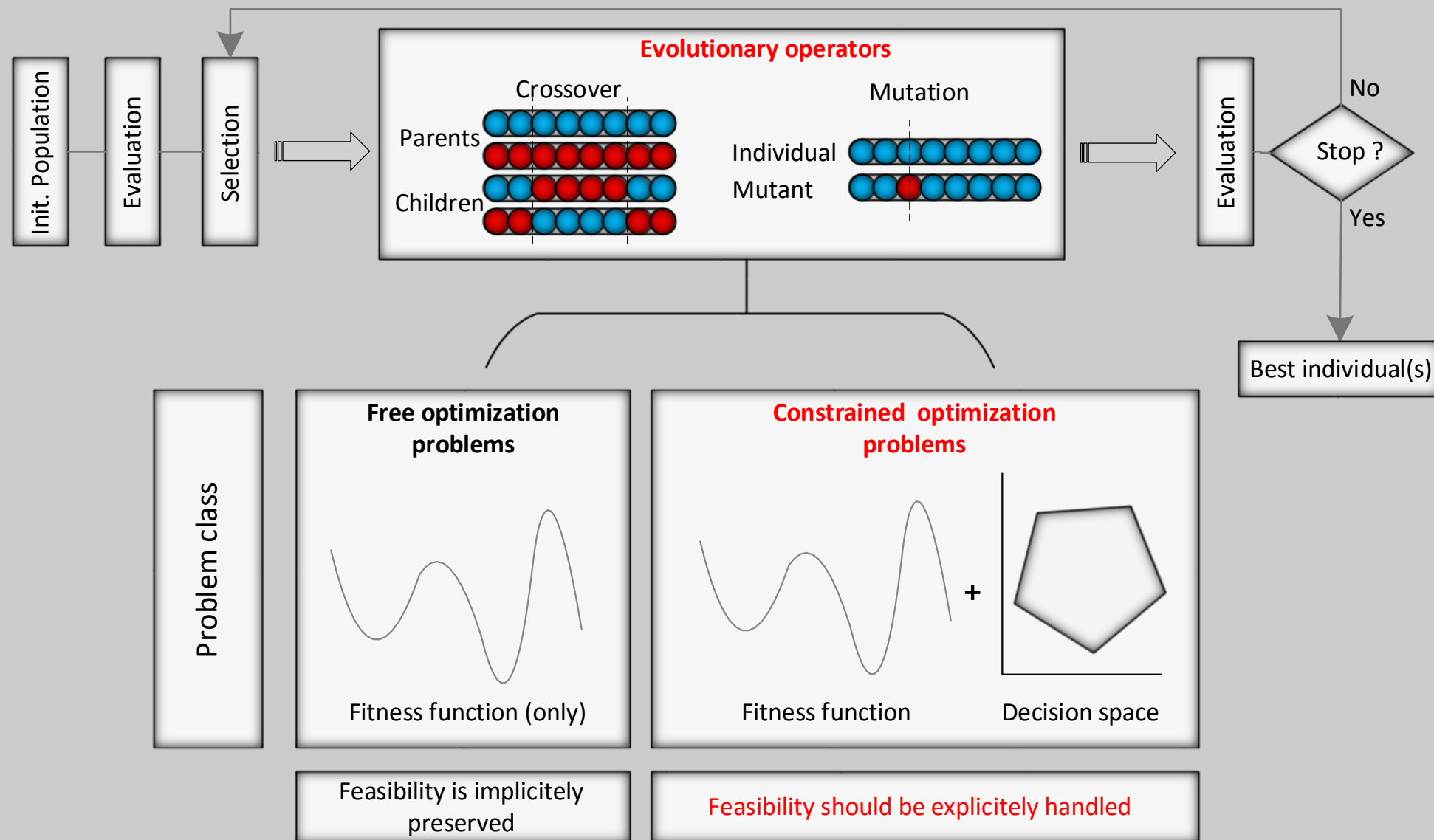
- Optimization of Real-parameter single objective constrained problems
  - [http://www.ntu.edu.sg/home/EPNSugan/index\\_files/CEC2017/CEC2017.htm](http://www.ntu.edu.sg/home/EPNSugan/index_files/CEC2017/CEC2017.htm)

IEEE Congress on Evolutionary Computation 2017

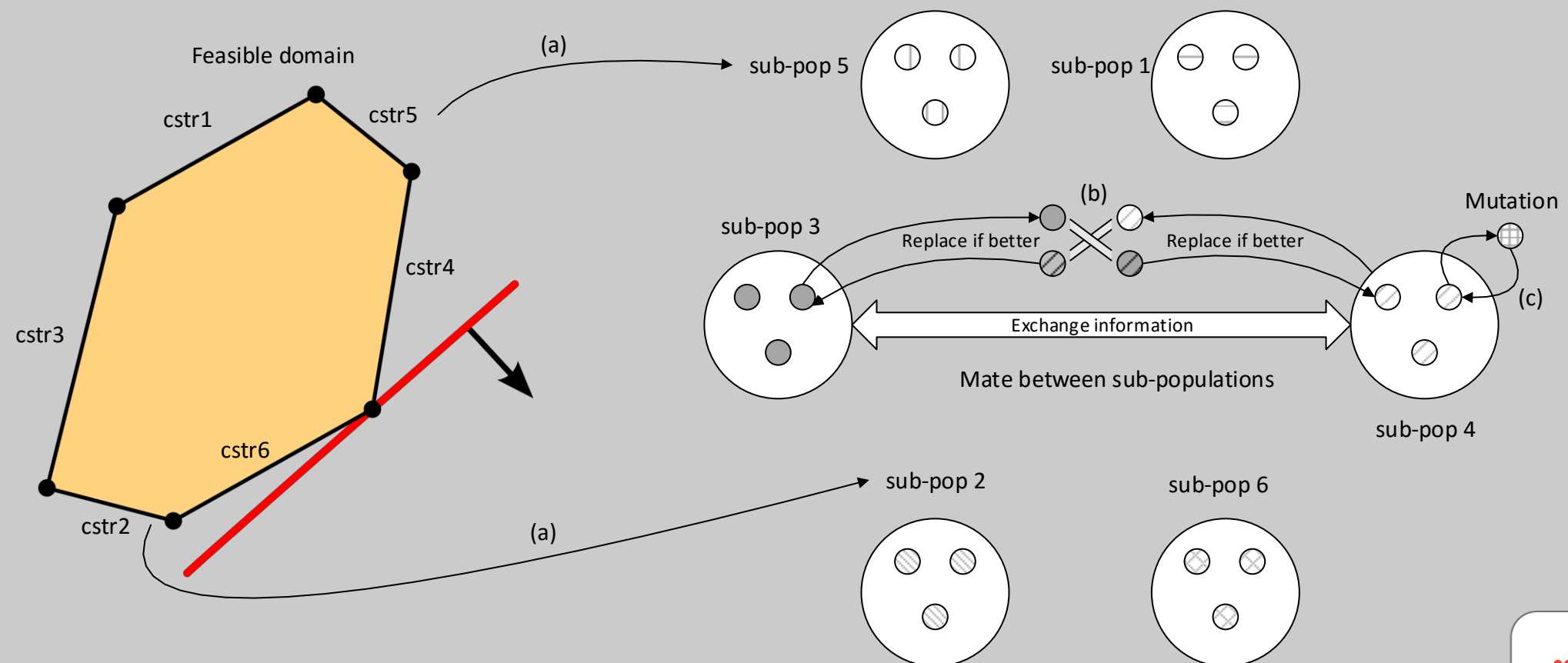
Donostia - San Sebastián, Spain

June 5-8, 2017

# EA for constrained optimization problems



- **Co-evolutionary constraint decomposition algorithm (CCDA)**
- **Decomposes the problem:**
  - Based on constraints
  - Good performance on older benchmarks from the literature



## ■ Task

- **Apply/adapt the CCDA on the CEC 2017 benchmarks**
  - Evaluate other cooperation mechanisms/parameters
- **If results/time allows : submit results to to official competition**
- **Be the best :-)**

## ■ Work environment

- **Programming language**
  - Python / C++
- **Usage of the UL HPC platform (Linux)**

**Questions?**

# Contact information

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Thanks for your attention