QuantAlgo
Quantum Algorithms and Applications
Jérémie Roland (coordinator)
SUCCESS STORY (highlights)

**CHALLENGE**
- Practical applications for future quantum computers

**SOLUTION**
- Developing new algorithmic techniques
- Adapting techniques to practical applications

**OUTCOMES**
- Techniques: backtracking, branch-and-bound, dynamic-programming, linear regression, etc.
- Applications: science & engineering (heat equation), mathematical finance (portfolio optimization), machine learning, etc.
IMPACT (RRI aspects)

OPEN SCIENCE:
70+ scientific articles published as green open access

SCIENCE EDUCATION:
10+ popularization conferences: e.g. QWorld (Latvia), TedX (Paris), excellence school for high school students (Latvia)
Other science education activities: Undergraduate summer project scheme (Bristol), QuBOBS project (Paris), popularization articles (Copenhagen, Paris), podcast (Cambridge),

GENDER:
Women in Quantum Development (WIQD)
IMPACT (potential users)

- ATOS: Leader in high-performance computing
- Quantum software development kit QLM
- Machine learning applications
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