



Call 2017

# QuantAlgo

Quantum Algorithms and Applications

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# 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



# QUANTERA

ERA-NET Cofund in Quantum Technologies



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