Call 2017

TheBlinQC

Theory-Blind Quantum Control

Florian Mintert

SUCCESS STORY (highlights)

CHALLENGE

qtech applications require control

conventional: inefficient/unreliable numerical simulations

SOLUTION

learn how to control in the experiment

PLANNED AND SURPRISING/UNPLANNED OUTCOMES

control with very noisy data (Sauvage et.al., PRX Quantum **1**, 20322 (2020))

quantum limited cooling of nano-particle (Magini et.al., Nature **595**, 373 (2021))

IMPACT (RRI aspects)

SCIENCE EDUCATION

bridge between theory and experiment: theorists can interact with experiment

PUBLIC ENGAGEMENT

Hands-on Radiation pressure demonstrator -- Long night of science Vienna, Center of Science Activities in Graz

IMPACT (potential users)

INDUSTRY BRANCH

quantum devices (current NISQ)

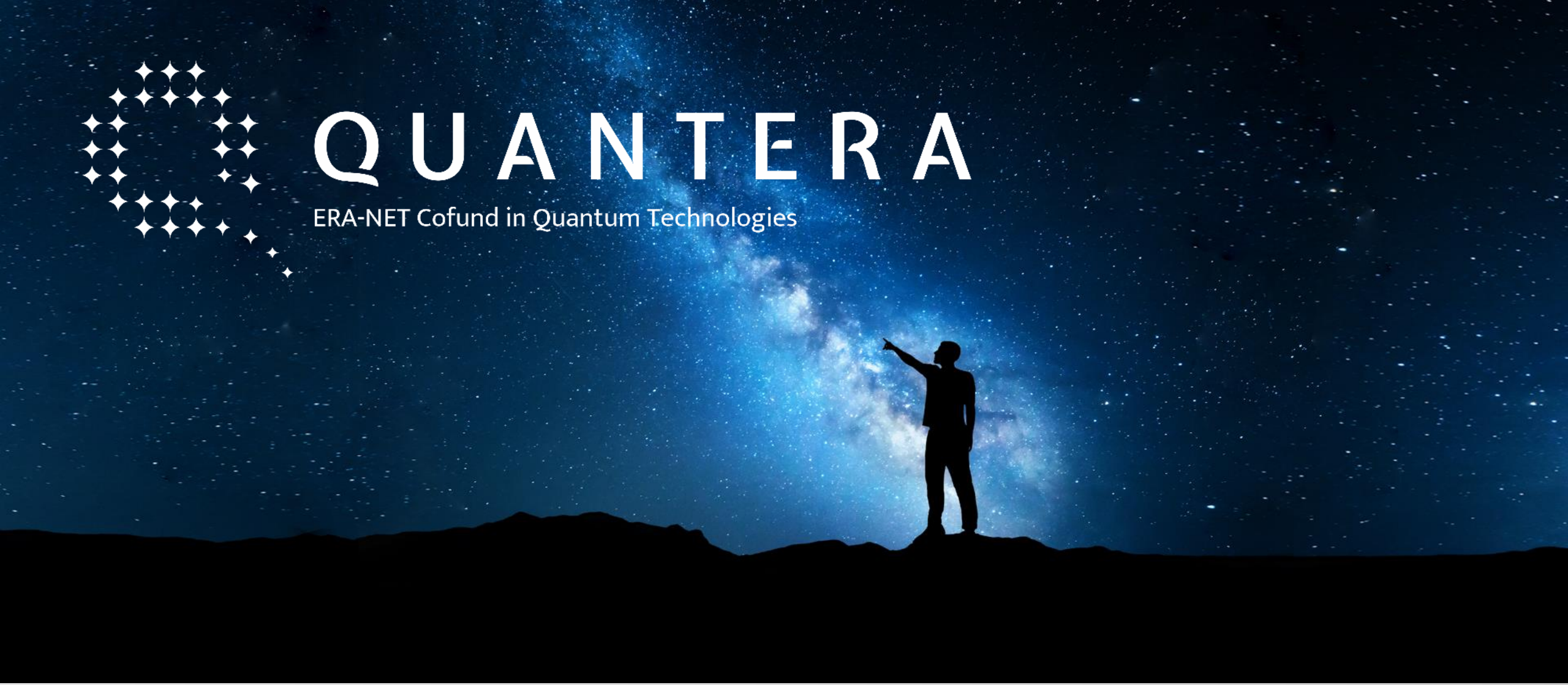
APPLICATIONS

quantum optimization, e.g. VQE

calibration of quantum device

END USERS

user, developer and manufacturer of quantum devices



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