Quantum Information Access and Retrieval Theory

Fact Sheet

Project Information

QUARTZ
Grant agreement ID: 721321

Funded under
H2020-EU.1.3.1.

Project website

Overall budget
€ 3 461 495,04

Status
Ongoing project

EU contribution
€ 3 461 495,04

Start date
1 January 2017

End date
31 December 2020

Coordinated by
UNIVERSITA DEGLI STUDI DI
PADOVA
Italy

Objective

Quantum Information Access and Retrieval Theory

We aim to establish an European Training Network (ETN) on QUantum information Access and Retrieval Theory (QUARTZ). Towards a new approach to Information Access and Retrieval (IAR) addressing the challenges of the dynamic and multimodal nature of the data and user interaction context, QUARTZ aims to educate its Early Stage Researchers (ESRs) to adopt a novel theoretically and empirically motivated approach to IAR based on the quantum mechanical framework that gives up the notions of unimodal features and classical ranking models disconnected from context. Each ESR will be aware that the current state of the art of IAR is not sufficient to address the challenges of a dynamic, adaptive and context-aware user-machine interaction and to make a major breakthrough in the overall effectiveness of retrieval systems, and that a genuine theoretical breakthrough is on the contrary necessary. We believe that this breakthrough can be provided by quantum theory
which can integrate abstract vector spaces, probability spaces and logic in a single theoretical framework which extend and generalize the classical vector, probability and logic spaces utilised in IAR. QUARTZ will consist of training activities and ESR research projects which investigate theoretical issues and evaluate methods and prototypes for adaptive IAR systems managing large data collections and meeting the end user's information needs in a dynamic context.

Field of science

/natural sciences/physical sciences/quantum physics

Programme(s)

Topic(s)

Call for proposal

H2020-MSCA-ITN-2016

Funding Scheme

MSCA-ITN-ETN - European Training Networks

Coordinator

UNIVERSITA DEGLI STUDI DI PADOVA

Address

Via 8 Febbraio 2
35122 Padova
Italy

Website

Contact the organisation

Participants (6)

THE OPEN UNIVERSITY

United Kingdom

EU contribution

€ 546 575.76
**UNIVERSITY OF BEDFORDSHIRE**

*United Kingdom*

EU contribution

€ 546 575,76

Address

University Square
LU1 3JU Luton

Activity type

Higher or Secondary

Education Establishments

Website [](#)

Contact the organisation [](#)

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**VRIJE UNIVERSITEIT BRUSSEL**

*Belgium*

EU contribution

€ 501 120

Address

Pleinlaan 2
1050 Brussel

Activity type

Higher or Secondary

Education Establishments

Website [](#)

Contact the organisation [](#)

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**KOBENHAVNS UNIVERSITET**

*Denmark*

EU contribution

€ 580 163,76

Address

Norregade 10
1165 Kobenhavn

Activity type

Higher or Secondary

Education Establishments

Website [](#)

Contact the organisation [](#)

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**BRANDENBURGISCHE TECHNISCHE UNIVERSITAT COTTBUS-SENFTENBERG**

*Germany*

EU contribution

€ 249 216,48

Address

Platz Der Deutschen Einheit 1

Activity type

Higher or Secondary
### Partners (6)

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<td>Linnaeus University, 35195 Vaxjo</td>
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<td>WEBSAYS SL</td>
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<td>Calle Napoles, Planta 7, Puerta 4 294, 08025 Barcelona</td>
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**Record number:** 205510  

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