

## **Deliverable Report**

### **Deliverable No: D8.1**

### **Deliverable Title: Project Logo and Website**

**Grant Agreement number:**

**Project acronym: EPIQUE**

**Project title: European Photonic Quantum Computer**

**Project website address: [www.quantumepique.eu](http://www.quantumepique.eu)**

**Name, title and organisation of the scientific representative of deliverable's lead beneficiary (task leader):**

Prof. Fabio Sciarrino, Università di Roma "La Sapienza"

Email: [fabio.sciarrino@uniroma1.it](mailto:fabio.sciarrino@uniroma1.it)

#### **Deliverable table**

<b>Deliverable no.</b>	D8.1
<b>Deliverable name</b>	Project Logo and Website
<b>WP no.</b>	8
<b>Lead beneficiary</b>	1 (UNIROMA1)
<b>Type</b>	DEC
<b>Dissemination level</b>	Public
<b>Delivery date from Annex I</b>	Month 3
<b>Actual delivery date</b>	4 April 2024

*What was planned (from Annex I:)*

#### **D8.1: Project Logo and Website [M3]**

A dedicated logo and website regularly updated with project results, publications, outreach activities, deliverables, etc





## What has been done

The EPIQUE project logo and website have been developed. The logo is intended to be the key of the visual identity of the project and will be used on the website, in all publicity material, presentations, letter heads, etc.

## LOGO DEVELOPMENT

The logo was designed to be graphically appealing and following the idea that the logo should represent continuity between the project acronym and the platforms at the core of the EPIQUE project. Two proposals of logos were designed and circulated for comments (Figures 3 and 5).



Figure 1. Logo option 1. Preliminary version

A preliminary version of a first logo was designed internally, which was analysed and redesigned by a professional afterwards.

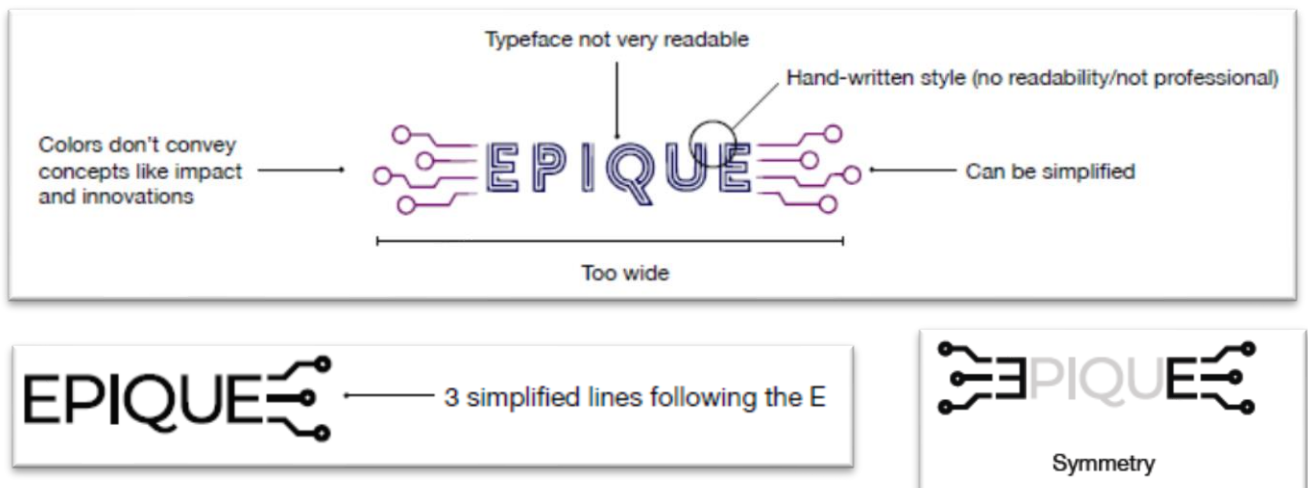


Figure 2. Analysis of the first version of the option 1.



Figure 3. Final version of Option 1 logo with two colour proposals



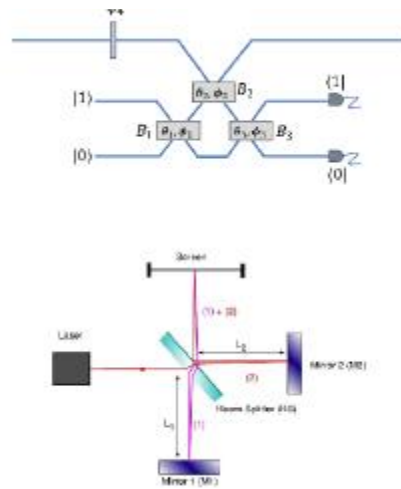
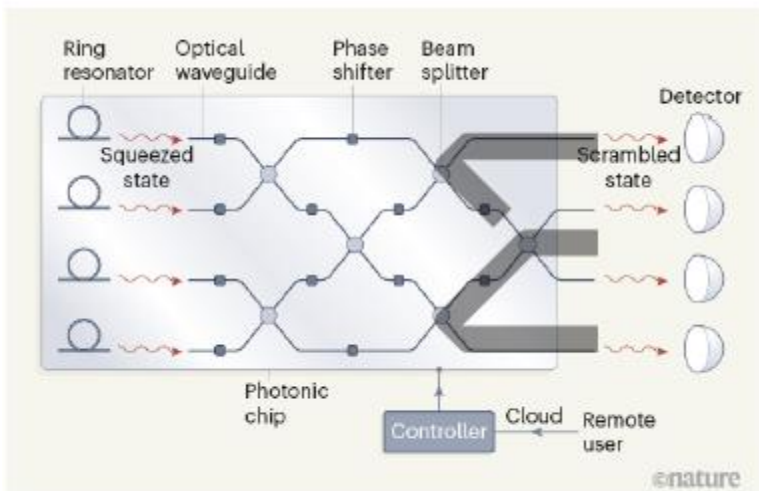


Figure 4. Logo Option 2. Rationale – Reflection/Interference/Circuit

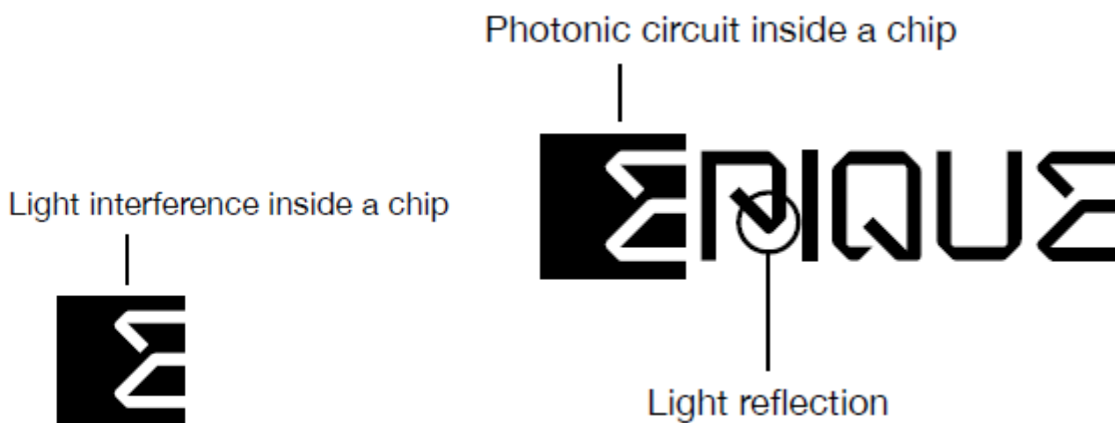


Figure 4. Logo Option 2. Analysis and Development



Figure 5. Final version of Option 2 logo with two colour proposals

The option 1 was selected by the EPIQUE partners, to obtain the final EPIQUE logo (Figure 6):

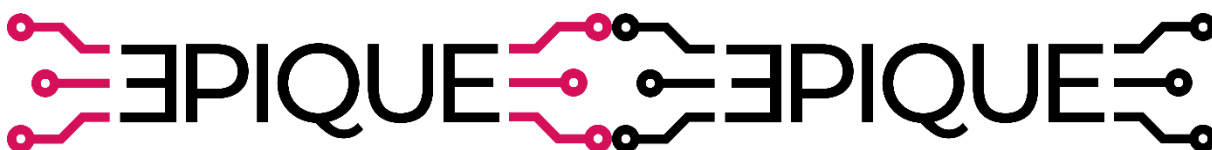


Figure 6. EPIQUE final logo in colour and in black



## WEBSITE

EPIQUE website is the project's key communication tool. The website is intended to be a mean of public dissemination of the project results and an effective way to share information among the project partners. It will be regularly updated by the EPIQUE project manager.

### *Domain*

We have registered a ".eu" domain name: **www.quantumepique.eu**

### *Website development*

To develop the website, we have analyzed the needs of the consortium and similar websites.

The website was developed according to partners' suggestions and according to the most recent standards, and it is accessible on mobile devices.

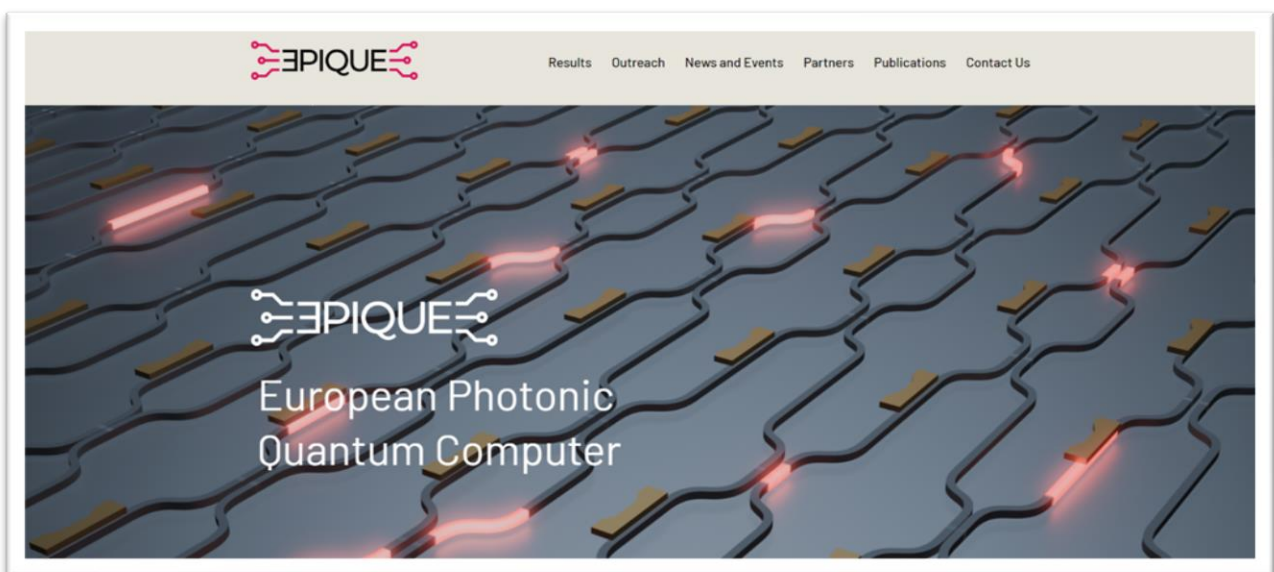
The website is focused on the communication to the public and will include pages devoted to project information and results, outreach, news, events, publications and information on the consortium members (see site tree below).

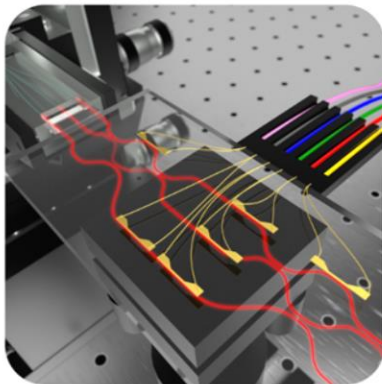


Figure 7. The site tree

### *Homepage*

This will be the landing page and will be focused on the communication to the public. It will include the mission and the vision of the project, the overview of the Consortium partners and includes the EU flag.






Our vision

## Universal and sub-universal quantum computing schemes

Measurement-based quantum computation scheme (MBQC) has been shown to represent a promising solution for an architecture capable of universal quantum computation using realistic hardware requirements. Within EPIQUE we expect to open exciting possibilities for the future of photonic quantum computing, starting with sub-universal scheme towards the implementation universal and fault tolerant MBQC.



### Ours Partners

#### Explore


- Results
- Outreach
- News and Events
- Partners
- Publications
- Contact

#### Find Us

 LinkedIn  
 Twitter

#### Contact

giuliana.pensa@uniroma1.it



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Figure 8. Shots of the EPIQUE homepage

### News and Events page

All news and events related to the project will published here as far as available.

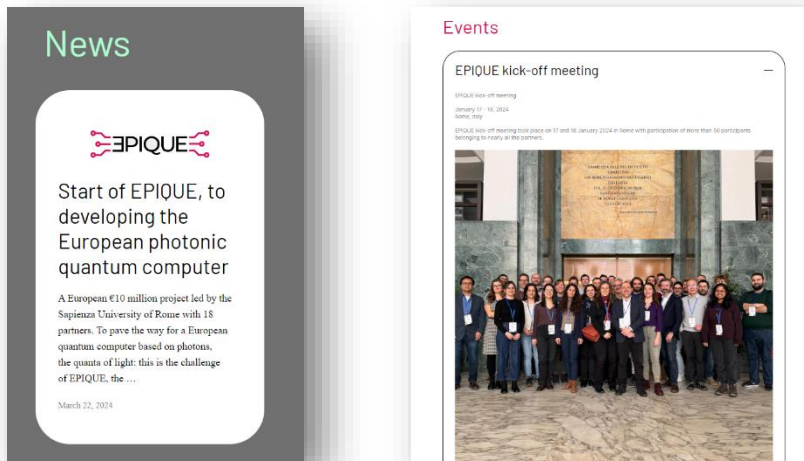
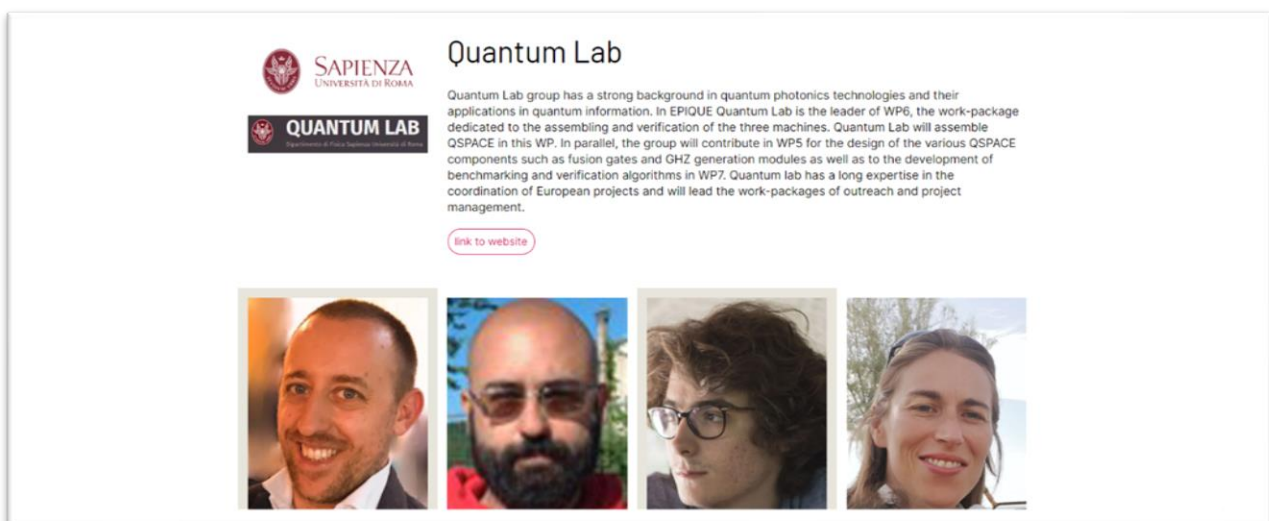
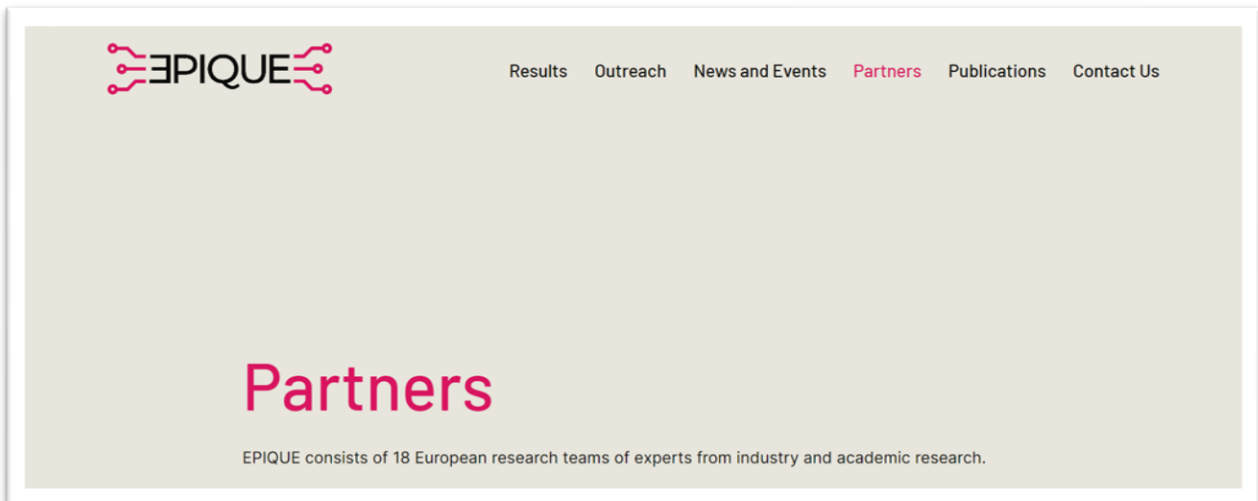



Figure 9. Examples of News and Events

### Partners

A Partners page has been created with the list of EPIQUE beneficiaries. For each beneficiary a separate section has been created, which includes a brief description of the role of the partner in the project, names, contribution and pictures of all team members involved in EPIQUE, as well as a link to the team webpage.







## UNIVIE


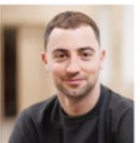


1) In Task 3.3, the University of Vienna (UNIVIE) will develop and deploy tailored switches to facilitate the realization of a mid-scale cluster-state quantum computation. These switches will enable feed-forward capabilities and minimize latencies, contributing to the project's objectives.


2) Work Package 5 focuses on the architecture design and analysis of key modules for the advancement of photonic quantum technologies. Task 5.2, led by the University of Vienna (UNIVIE), entails the analysis and optimization of the graph-state generation module, aimed at creating high-quality graph states essential for various quantum computing tasks. Concurrently, Task 5.3, also led by UNIVIE, delves into the architectural choices for the graph-state fusion module, facilitating the growth of larger graph states from fusion operations on smaller ones, including (thermalized) 3-photon GHZ states. Both tasks involve comprehensive analysis, emulation packages, and techniques to validate operations and assess performance for small-scale computations.

3) Task 6.2, led by the University of Vienna (UNIVIE), involves the assembly of the time encoding machine (QTIME), utilizing quantum dot-based photon sources, programmable linear-optical elements, and eventually feed-forward capabilities to enhance protocol complexity. The ultimate goal of QTIME is to implement universal time-bin linear optics at a medium scale, surpassing manipulation of 10 qubits or photons.

4) Task 7.3, led by the University of Vienna (UNIVIE), focuses on the validation of experimental benchmarks across all project partners. Each experimental group will contribute standard validation benchmarks for their respective components. UNIVIE coordinates this effort, ensuring the adoption of advanced standards and validation methods throughout the project.

[link to website](#)









## INL


INL will provide to the project theoretical expertise on photonic quantum computation. Namely, it will coordinate WPS, which addresses the theoretical modeling of both near-term and scalable architectures for photonic quantum computation. It will also contribute for the realization of the tasks from WP7, regarding verification of quantum computation, tests of non-classicality as well as applications of non-universal photonic quantum computers.

[link to website](#)




**Ernesto Galvilo**  
Principal Investigator

Ernesto Galvilo is the leader of the Quantum and Linear-Optical Computation group at INL. He is particularly interested in photonic implementations of quantum computers, with a long track record of...




**Leonardo Novo**

Leonardo Novo is working on validation techniques for boson sampling, applications of non-universal photonic devices and different quantum computation models such as quantum walks and will contribute for WPS and WP7.



**Anita Camarini**


Anita is studying photonic fusion gates and will contribute in WPS.



## Single Quantum


SQ is a manufacturer of Superconducting Nanowire Single Photon Detectors (SNSPDs) and is responsible for leading workpackage 4, dedicated to high efficiency detectors, a key component in developing photonic quantum computers. Within workpackage 4, SQ task is to focus on optimizing SNSPDs in order to reach the best possible efficiency together with an ultra-high detection count rate.

[link to website](#)




**Mario Castaneda**  
Principal Investigator

Mario's expertise involves experimental Quantum Optics together with experience in coordinating and executing research projects related to SNSPDs development for various applications. He will oversee the activities related to EPIQUE within SQ.




**Martin Cakarola**  
Lead Application Scientist

Martin is specialized in SNSPDs for imaging and quantum applications; he will simulate and design the SNSPDs to be used in EPIQUE.



**Federica Facchin**  
Research Engineer

Federica is involved in multiple research projects regarding the SNSPD technology innovation and improvement; in EPIQUE, she will contribute by communicating with the project partners to incorporate their input in the device design.



**Amin Fakhr**  
Application Scientist

Amin has experience with characterization of SNSPDs and using these detectors in free-space and fiber-coupled optical systems; he will thoroughly test the detectors for EPIQUE.

Figure 10. Shots from the EPIQUE Partner page

### Outreach page

This page includes reference to outreach and dissemination activities carried out by the project partners, which will be published as far as the content becomes available. Also, the dissemination materials such as leaflets, videos, produced by the partners will be uploaded here.

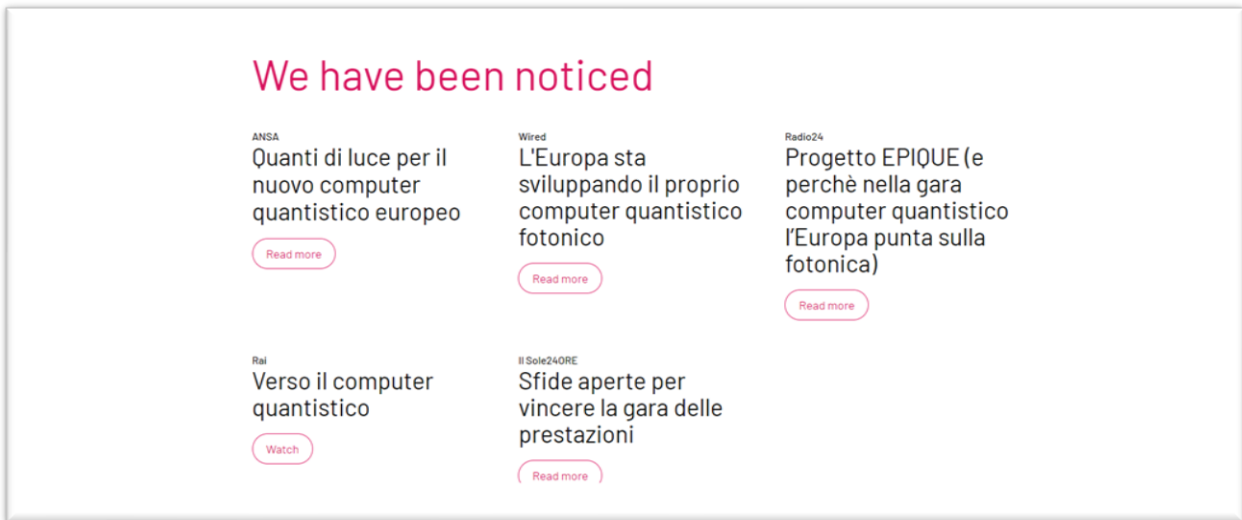


Figure 11. Outreach page

### Results page

This page will briefly summarize the outcomes of the project and will include deliverables, software and public data. All deliverables intended as public will be published in this section as far as approved by the EC, as well as software and data.

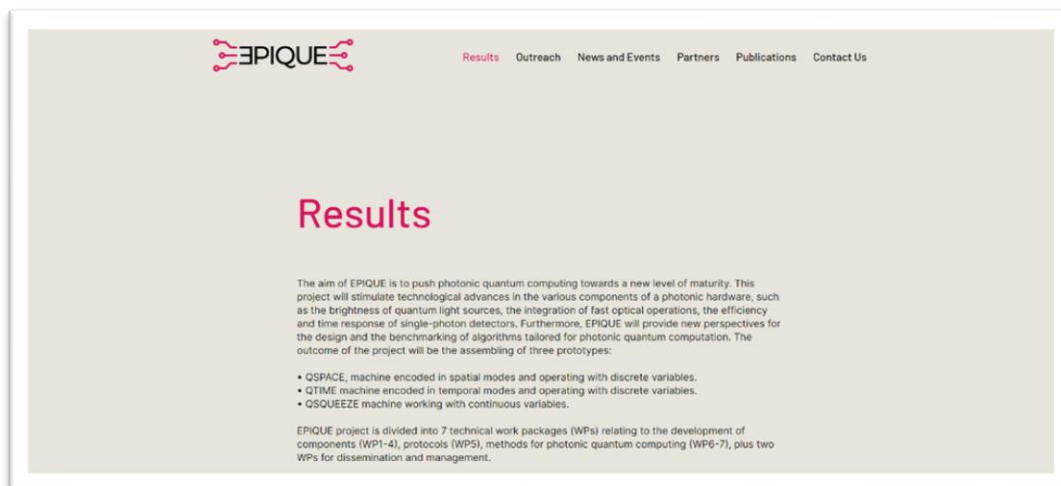


Figure 12. Results page

### Publications page

A page will list all publications with project results. Each reference will be linked to the published publication and to the publication version posted on the public repository.





# Annex 1

## Concept Design of the EPIQUE logo

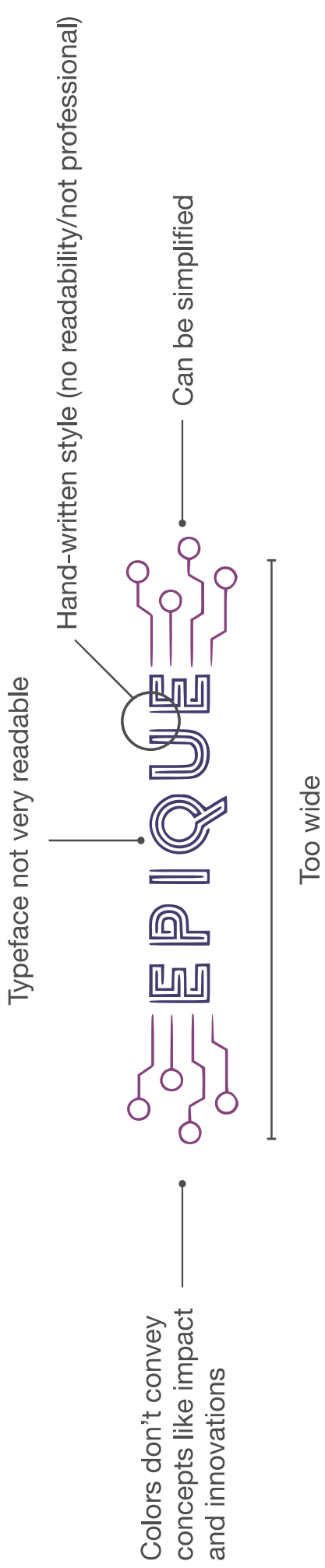


Option 1.

Old version



# Old version - problems



New version - rationale

# EPIQUE

More readable and compact font

New version - rationale



3 simplified lines following the E



New version - rationale

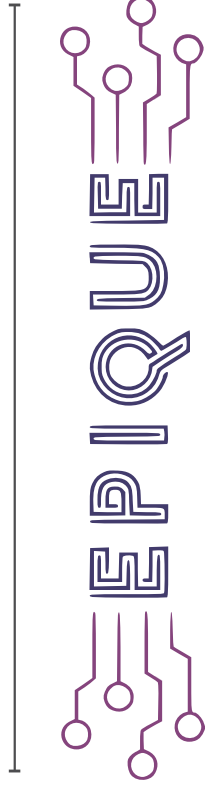


Symmetry

Logo

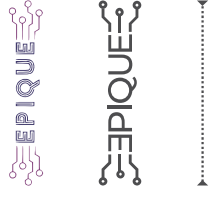
EPIQUE

## Logo comparison



More compact  
(Although it seems bigger)

## Logo comparison



Better readability at small sizes

Color option

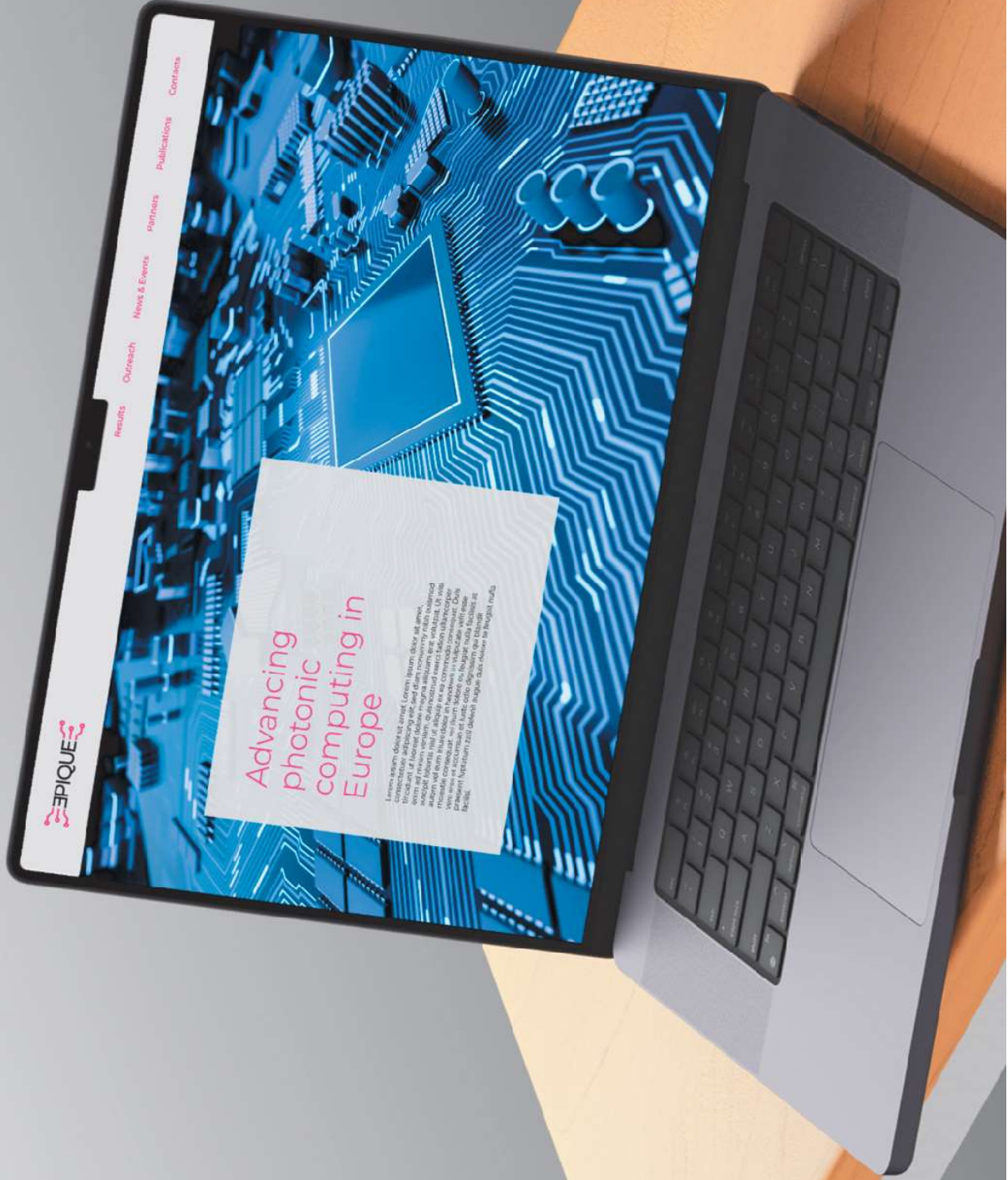


Color option



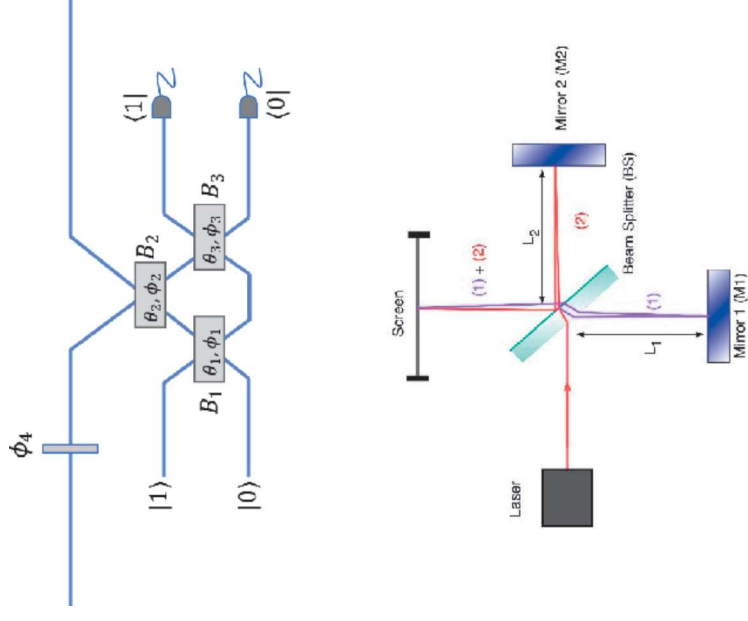
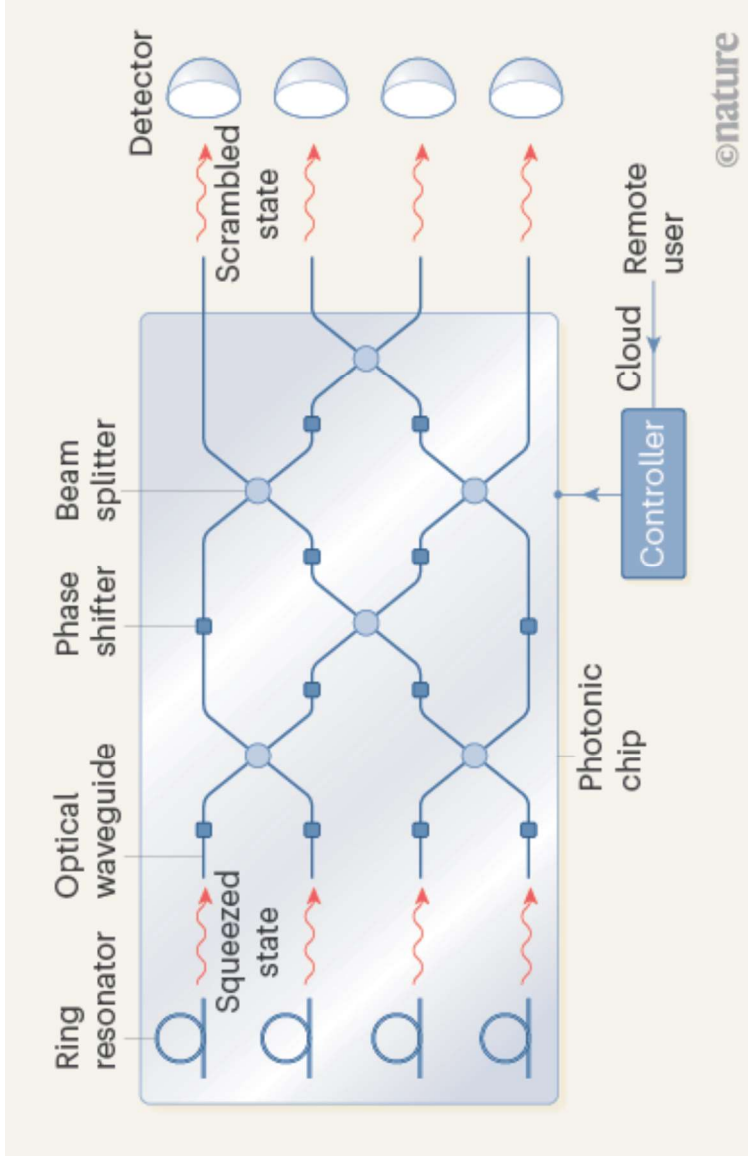


In use

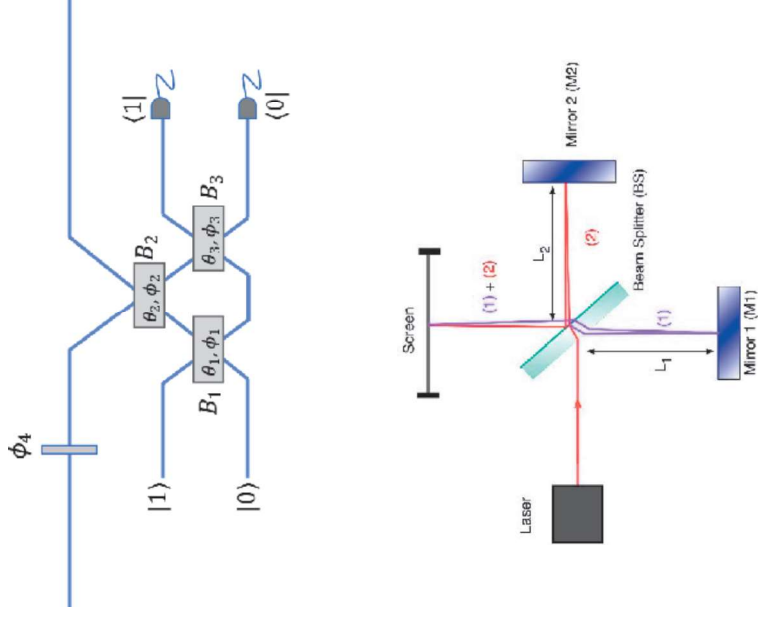
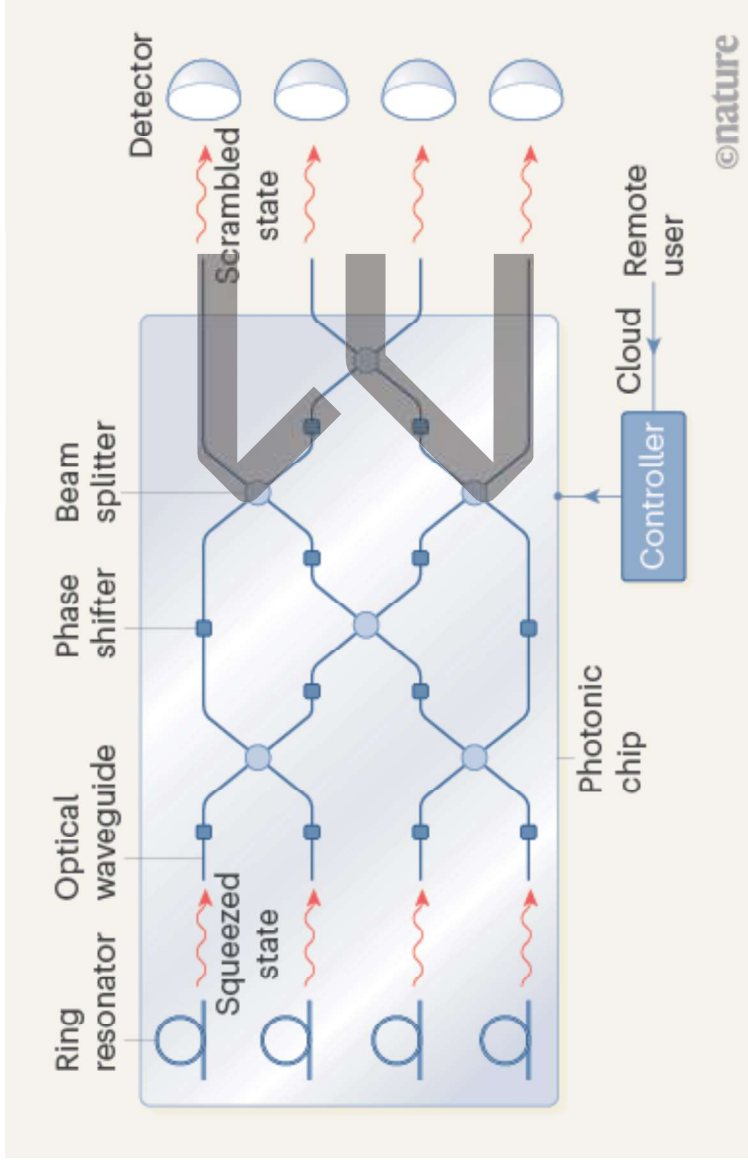


Option 2.

# Rationale - Reflection/Interference/Circuit



# Rationale - Reflection/Interference/Circuit



## Symbol

Light interference inside a chip



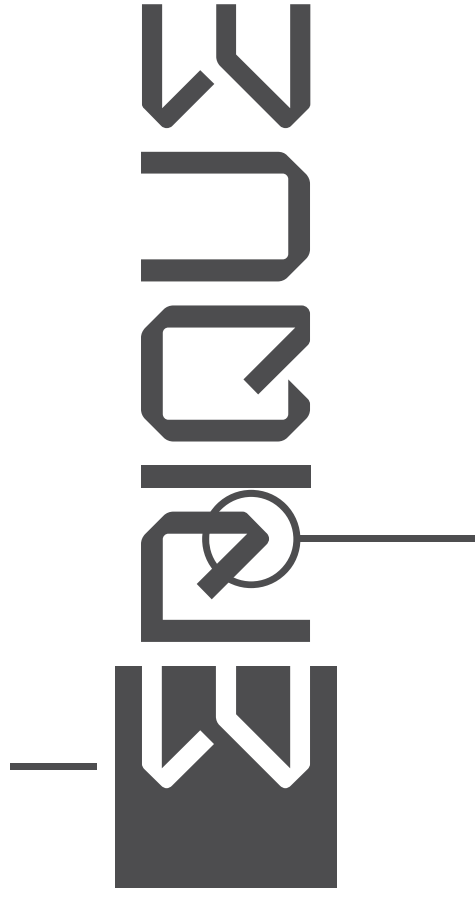
Logo





Logo

Photonic circuit inside a chip



Light reflection

Color option

WORLDWIDE

Color option

ERIQUE

Full font for use

Publications

Results

Deliverables

Outreach

Contact

In use



In use



In use



1

TECHNIQUE

2

TECHNIQUE