

To Photonics21 Secretariat

via eMail: secretariat@photonics21.org

Dear Photonics21 Secretariat,

We herewith submit the nomination of the following Photonics21 Board of Stakeholders candidate [organisation] / [representative].

- Letter of Nomination Photonics21 Board of Stakeholders
Election 2025

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§ 5 BOARD OF STAKEHOLDERS (6) b....A candidate nomination will always contain the name of the candidate organisation together with its proposed BoS Representative and voting on a candidate implies voting on this combination.

1. Full legal name of the affiliation nominated as BoS Member (candidate's organisation):

University of Padova

2. Full contact details of the affiliation (street, postal code, country) nominated as BoS Member and invoice address (In accordance with the Terms of Reference §5, which the Affiliation acknowledges having received, an Annual Service fee will be invoiced every year during the first quarter to the BoS Member. By signing the present letter, the BoS candidate agrees to pay this Membership Fee. The Fee will be considered an asset of the Photonics 21 AISBL in accordance with its statutes (article 12b).)

Giuseppe Vallone, Piazzale Mazzini 43, 35137 Padova (IT)

c/o University of Padova Via 8 Febbraio, 2 - 35122 Padova (IT)

3. Name of the suggested BoS Representative (the personal candidate)

Giuseppe Vallone

4. Information about the BoS candidate and the BoS representative

Extract Photonics21 Terms of Reference¹: "§ 5 BOARD OF STAKEHOLDERS; ... (6) Election of BoS Members: "Description of the activities of, and information about the added value and contribution to the BoS by both the nominated BoS member and the BoS Representative"

a) Description of the activities and information about the expected contribution and value added the <u>nominated BoS member (candidate's organisation) will bring to the BoS²</u>

¹ Photonics21 Terms of reference are available at https://www.photonics21.org/download/about-us/structure/Photonics21 Terms of Reference June 2021.pdf?m=1738079681&

² The candidate is aware and accepts that according to the Photonics21 Terms of Reference (§ 5 (10) a member ship fee - as determined by the General Assembly of the Association - needs to be paid to the Photonics21 association.

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The University of Padova is at the forefront of photonics research, with multiple groups dedicated to advancing the field in various domains. Our expertise spans optical classical and quantum communications fiber sensing, as well as photonics research on several topics, from light generation to detection, including also adaptive optics, imaging and ground and space ranging. We strongly believe that these expertise and activities are positioning us as a valuable contributor to Photonics21's mission.

Our quantum communication group is actively pushing the boundaries of secure information transfer, while our classical communication team focuses on enhancing existing optical networks. The fiber sensing research complements these efforts, developing cutting-edge technologies for environmental and structural monitoring.

Two of our flagship projects, QNSP (Quantum Networks for Secure Photonics) and PIQS (Photonic Integrated Quantum Systems), showcase our commitment to innovation in photonics. QNSP aims to develop next-generation quantum-secured communication networks, while PIQS focuses on creating scalable, integrated quantum photonic devices.

By joining the Photonics21 Board of Stakeholders, the University of Padova will bring:

- 1. Multidisciplinary expertise spanning both fundamental and applied photonics research
- 2. A track record of successful, large-scale projects in quantum and classical photonics
- 3. Strong connections with industry partners, facilitating knowledge transfer and commercialization
- 4. Access to state-of-the-art facilities and a pool of talented researchers and students
- 5. A commitment to push innovation and collaboration in the European photonics landscape
- **b)** Description of the activities and information about expected contribution and value added the BoS Representative (candidate / person) will bring to the BoS.

As a Full Professor at the University of Padova and a leading expert in quantum communications, Giuseppe Vallone brings his expertise to the Photonics21 Board of Stakeholders. His research at the Department of Information Engineering focuses on quantum technologies, and in particular on quantum communication.

Prof. Vallone's leadership in quantum projects at the university demonstrates his ability to drive innovation and manage complex research initiatives. His experience as coordinator of two European projects, one ongoing, showcases his capacity to lead international collaborations and navigate the European research landscape.

Prof. Vallone is very active in the relation between academic research and industrial applications. This long patent list and technology transfer experience provides him with unique

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insights into the commercialization of photonic technologies and the challenges faced by startups in the field.

Vallone's contributions to the BoS will include:

- 1. Deep technical expertise in quantum communications and related photonic technologies
- 2. Strategic vision for the future of quantum technologies in Europe
- 3. Experience in project coordination and management at the European level
- 4. Understanding of both academic and industrial perspectives in photonics
- 5. A track record of innovation, as evidenced by multiple patents and more than 130 publications
 - 6. Extensive international collaborations, to enhance global cooperation in photonics

With his comprehensive background spanning academia, industry, and innovation, Giuseppe Vallone is well-positioned to contribute significantly to the strategic direction of Photonics21. His involvement will help drive the development and implementation of quantum technologies within the broader European photonics ecosystem.

Final information from the Photonics21 secretariat:

- We recommend limiting the BoS nomination letter to 3-4 pages max.
- Letters of nominations should be submitted electronically to <u>secretariat@photon-ics21.org</u>
- It is highly recommended to consult the <u>Photonics21 Terms of Reference</u> before submitting the nomination.
- Please note that the deadline for providing BoS nominations to the Photonics21 Secretariat is 20 September 2025.