

## Five years of *Communications Physics*

*Communications Physics* is five years old. So we are celebrating, with a special anniversary collection. And as we do every day with exciting physics papers, we take a moment to reflect on our journey so far and our future direction.

Whether you like counting with your fingers, easy multiplications, the atomic number of boron, that polygon you see as a dodecahedron face, or the number of Lagrangian points in two-body systems, then your number is 5.

For *Communications Physics*, 5 is the number of exciting and intense years building a preferential channel for promoting and disseminating inclusive and interdisciplinary physics.

The journal was opened for submissions in September 2017, with the vision of offering an Open Access and interdisciplinary physics journal, where authors could find a venue to publish and read high quality papers directed to specialist communities. The first step to realise our vision came with the first published papers on the 22 of February 2018.

Five years on, our passion to serve and actively interact with the physics community has resulted in the publication of over 1100 papers, growing from 97 in 2018 to 329 in 2022. We want to express our gratitude to all our authors, who have supported us in making our vision concrete. Particularly, we acknowledge those early authors who have put their trust in this new journal and helped raise its profile across the widespread communities of physics. However, authorship is just one aspect of guaranteeing high-quality research. We could not have reached this point without the continued support of our reviewers, whose expertise and insights are vital: for the authors, to improve their research and match the criteria of novelty and high-quality we constantly seek; for the editors, to make thoughtful (and sometimes hard) decisions on each and every paper.

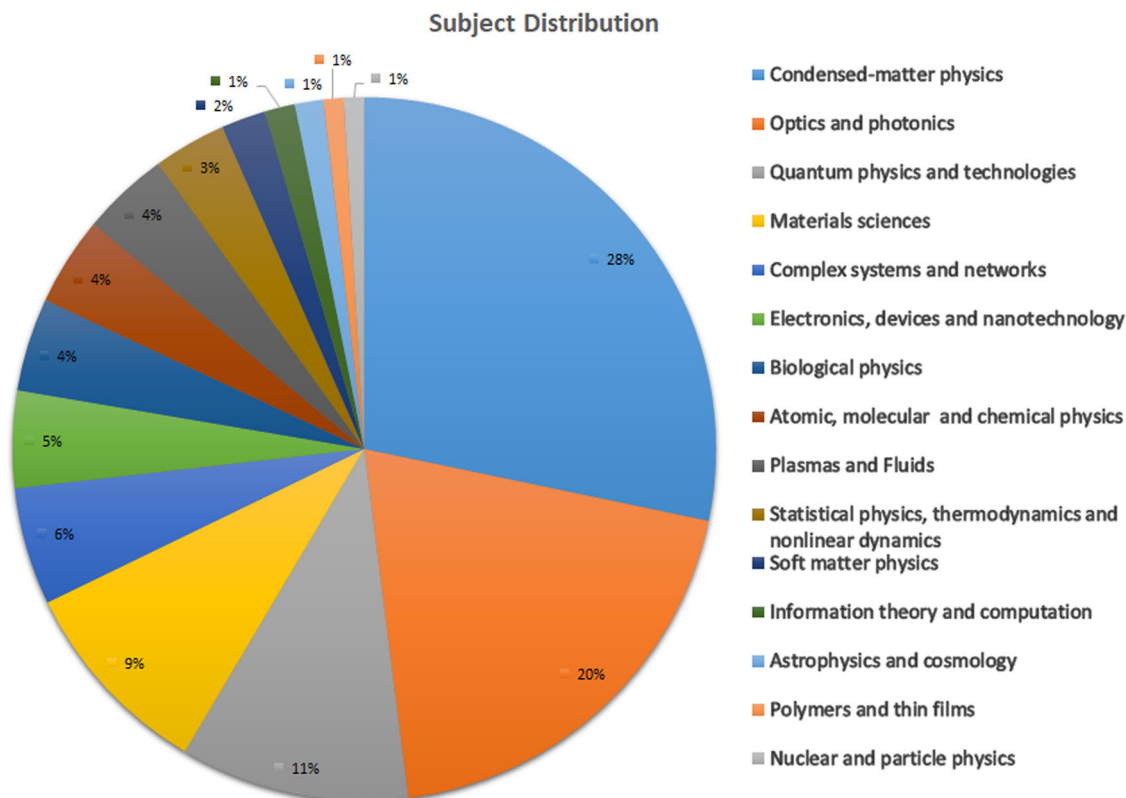
As a part of the Nature Portfolio, we too have embraced the practices of reproducibility and transparency, but we adopted a different approach with regards to the editorial model. At *Communications Physics* we wanted to connect the apparently

distant worlds of editors and authors. We found our bridge in sharing editorial activities with academic [Editorial Board Members](#) (EBMs), who work alongside our in-house editors in assessing manuscripts, selecting referees and making decisions on what gets published. Our EBMs share the same dedication to support the journal goals: they bring complementary in-depth expertise and knowledge of their specific communities. While constantly interacting with professional in-house editors, EBMs get a close insight in the editor job; professional editors, on the other hand, offer a broader expertise and enforce consistency across the various subfields represented in the journal and adherence to editorial policies. We are proud of our collaborative editorial model and we believe that it strongly contributes to guarantee a fair and more unbiased evaluation of each manuscript.

For this reason, we are delighted to see our editorial board growing steadily over the five years, with 37 active members in 2023. We like to think that being part of our Editorial Board also aids early-stage researchers developing into well-recognised figures in a community: it offers the chance of creating links between researchers and being constantly updated on the state-of-the-art. A few of our early EBMs have now moved on; we wish them the best of luck and heartily acknowledge them as they have been instrumental in the early success of the journal. One of our funding EBMs is sharing their experience with the journal in more detail<sup>1</sup>.

In the past five years we have introduced a number of key features to support our goals of transparency, diversity and to be a multidisciplinary physics journal.

In 2019 we adopted the practice of Transparent Peer Review. All our authors have since had the choice to publish the reviewer reports and their rebuttal, stimulating authors and reviewers to converge on a high-quality paper and giving more clarity on the determining steps that



**Fig. 1 Subject distribution.** Subfields of physics published in *Communications Physics* between February 2018 and February 2023.

led to the publication (see Ref. <sup>2</sup> for more details).

As a form of recognition for our reviewers' work, we highlight our most **outstanding reviewers** every month and encourage mentorship among our reviewers<sup>3</sup>.

Our authors come from 78 countries, and we strive to have a geographically diverse pool of referees. Physics research is notoriously not very diverse when we look at gender (see e.g., Refs. <sup>4–6</sup>), but we have been actively selecting women physicists for the editorial board and for reviewer activities. While our female representation on the board is just over 30% –higher than the average representation of women at post doc level and above in most countries– we are aware that it is just the beginning of what can be done in this direction. At the same time, we believe that it is important for earlier career researchers to have women role models in our editorial board, and we have an ongoing goal to diversify our reviewer pool too.

With the goal of establishing our journal as multidisciplinary, in 2020 we have initiated a programme of Focus Collections, with the purpose of demonstrating our interest in emerging fields and attracting the highest level of research in them, providing a resource of reference for researchers entering the new field. A mention of honour goes to our first

collection on **Higher-order interaction networks**, which has been very well received and has attracted a growth of submissions in the interdisciplinary field of complex systems, encouraging us to follow up with more **Focus Collections**.

Invited-only Focus Collections are an initiative that has already shown some early success, but our core goal is to represent the physics community as a whole. As such, we have been striving to publish across all specialisms and subfields. We are aware that this is a challenging and ever-evolving process, even more so when accounting for the young age of our journal. Our papers provide a broad representation of the diversity of physics research (Fig. 1), and we have particularly seen a growth in multidisciplinary physics research, reflecting the new directions, in several research areas, to overstep the boundary of the specific sub-fields.

For the future, we aim to proactively attract and retain few currently under-represented specific communities to the journal, like high energy particle physics, astrophysics and biological physics. In the past couple of years we have also been welcoming more applied physics research, recognising the impact of physics in advancing both fundamental and applied science.

Our five years anniversary calls for celebrations and to do so, the editorial team,

together with our board members, have curated a **collection of our favourite papers** and other content that we have shared with our readers over this time.

We believe that *Communications Physics* is establishing itself as a recognised and valuable source of information and publishing, and we are committed to invest our energies in ensuring that impactful physics finds its spot among our (virtual) pages.

As five is also our number, we thank everyone who supported our birth and growth, and we look forward to the next five years.

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## References

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