

## Editorial

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As 2020 is coming to a close, we reflect again on an eventful year for the journal, and upcoming developments.

## Coronavirus Special Issue

In a year during which the COVID-19 pandemic dominated not just the general news, but also the scientific publishing world, *Mathematical Modelling of Natural Phenomena* was at the forefront. As the first wave of the pandemic took hold in Europe, Vitaly Volpert and colleagues in France, Russia, India, Poland and the UK, wrote an Editorial titled «[Coronavirus – Scientific insights and societal aspects](#)». This gave rise to the idea that the journal is uniquely positioned to evaluate and publish articles focusing on mathematical modelling of a broad range of topics related to coronavirus infection and epidemic, and the decision was made to launch a new special issue on this topic. 10 Guest Editors from various countries with complementary expertise joined Vitaly to handle these articles. By November 2020, close to 100 submissions were received and 16 articles were published in the special issue on “[Coronavirus: Scientific insights and societal aspects](#)”.

## Subscribe to Open programme

In early 2020, EDP Sciences and the SMAI (Société de Mathématiques Appliquées et Industrielles) mathematical society decided to pilot a new, innovative open access model called “Subscribe to Open”. MMNP was chosen as the pilot journal, see [press release](#). Under this model, institutions are asked to subscribe as usual, and as long as the publisher receives the expected subscription income, then the current volume is made available to all in full open access. All authors may publish in MMNP in open access under a [CC-BY 4.0](#) license, free of charge. The program is reviewed every year to establish whether the year’s content can be open. The success of the MMNP Subscribe to Open pilot in 2020, and the evolution of the publishing landscape with many small and medium society and commercial publishers experimenting with this model, has encouraged EDP Sciences to transition its entire portfolio of mathematics journals to open access under this model (see [press release](#)). This transition is in particular supported by the [French National Committee for Open Science](#). We are hoping that the program remains sustainable in years to come so that MMNP and the other mathematics journals can remain fully open access, for the wider benefit of science and society. For this we are appealing existing and new subscribers to join the program. For further information or to join the programme, please [contact EDP Sciences](#).

## Impact Factor

In mid-2020, we were pleased to [report](#) that the Impact Factor of MMNP increased by 73% in 2019. The Journal Citation Reports®, published by Clarivate Analytics, showed an increase from 0.949 in 2018 to 1.642 in 2019. The journal is now ranked in the second quartile in the two categories of Mathematics Applied and Mathematics Interdisciplinary applications, and in the third quartile in Mathematics & Computational Biology.

## Publication format

In 2020, we introduced a number of innovations in the publication format of MMNP.

Firstly, the journal moved away from the previous bi-monthly publication format with 6 bi-monthly issues published per year, to an “open volume” format. A new volume is opened each year, and articles are included in the volume in the order in which they have been processed. Articles are numbered instead of being paginated. The publication of a topical issue does not have to be planned to coincide with a physical journal issue anymore, which means that articles in topical issues or outside of specific topics can now be published as soon as they are ready, and multiple topics can be published in parallel. The publication in open volume greatly simplifies the publication process, and reduces publication times for authors.

Secondly, accepted articles prior to final publication are now available in a “[forthcoming](#)” section . The accepted version of the article is attributed a DOI and posted online. Authors can cite their articles as “in press” with its DOI, which means that articles can already be cited before they receive their final publication details (volume and page number).

Thirdly, we piloted the publication of different article formats beyond the PDF format which is designed for reading printed articles. Articles published in the Coronavirus special issue are also available in HTML and ePUB format, free for all to read conveniently on any device (smartphone, laptop, e-reader).

### **Open calls for submissions and submissions outside of special topics**

In 2020, we not only opened all topical issues to spontaneous submissions, but we also began to encourage spontaneous submissions outside of identified topics.

On the MMNP platform, a new tab “[Calls for submissions](#)” lists the topical issues that are currently open for submissions. Every topical issue contains a mixture of invited articles and spontaneous submissions. Each topical issue is managed by a team of Guest Editors, and overseen by the Editor in Chief. In keeping with the high standards of the journal, every article is peer reviewed.

In an [Editorial](#) at the beginning of 2020, we also announced that alongside the topical issues which still form the bulk of the journal and have made its strength and uniqueness over the years, MMNP will be seeking submissions of articles outside of identified topics. All submissions should present sufficiently advanced mathematical models in the context of applications to real world problems.

### **Re-structuring of the editorial board**

To accompany this change in direction, and as announced in the previous Editorial, the editorial board of MMNP has been restructured. While previously a different, temporary editorial board was set up to handle each special issue, a semi-permanent [editorial board](#) of experts in mathematical modelling applied to biology, medicine, chemistry, physics, and other areas has now been constituted. The new structure of the board is made of an Editor in Chief, two Associate Editors and a board of Editors.

Guest Editors of each topical issue are credited in the respective topical issues they handled, see list of [published topical issues](#) (including topical issues in process). We thank all former and current Editors of the journal for the great work they have done to bring MMNP to its current position, and we look forward to another year of excellent content in the journal.

