

Fifth Minisymposium ***on HPC APPLICATIONS IN PHYSICAL SCIENCES***

in conjunction with 14th international Conference
on ***Parallel Processing and Applied Mathematics***
Gdansk, Poland, September 11-14, 2022 (**PPAM**)

Modeling and numerical simulations have become important tools in physical sciences and materials design. Significant results have been achieved in simulations of static and dynamic properties of the condensed and soft matter systems using the HPC resources. The Minisymposium is devoted, but not limited, to HPC applications in physical sciences and aims at addressing the following topics:

- scalability of the simulation tools in the HPC environment;
- the overlap between the *ab initio* and phenomenological modeling;
- non-classical dynamics in the low-dimensional magnetism;
- new approaches and simulations methods;
- new tools and environments in materials science computations.

Scientific success of this Minisymposium will result not only from an overview of high-performance computing in a variety of systems, but also from recognizing the limitations of the available theoretical tools and from the identification of challenging areas where new efforts will be required to further advance the field.

ABSTRACT and PAPER SUBMISSIONS, ORAL PRESENTATIONS

Abstracts of the size 500 – 800 words or original papers, not previously published or submitted for publication elsewhere, are invited for the Minisymposium. The latter should be prepared according to the Springer LNCS and PPAM 2022 rules. Submissions, accomplished via the **PPAM** Conference system [EasyChair](#) before **May 6, 2022**, will be refereed and accepted on the basis of their scientific merit and relevance to the workshop topics.

The authors of accepted abstracts or papers can feature their contributions in the special Minisymposium oral session, but only one per registered participant. Only

papers presented at PPAM 2022 will be included in the proceedings published after the conference by Springer in the series Lecture Notes in Computer Science.

IMPORTANT DATES:

Submission of Papers:	May 6, 2022
Notification of Acceptance:	June 17, 2022
Camera-Ready Papers	November 2, 2022

MINISYMPOSIUM CHAIRS & ENQUIRY

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