

PREFACE

The Fifth International Workshop on “**State of the Art in Nuclear Cluster Physics**” (SOTANCP5) was held in Hvar, Croatia, from June 10 to 14, 2024. This was the fifth workshop in the series that started in Strasbourg in 2008 and continued in Brussels in 2010, Yokohama in 2014, and then in Galveston in 2018. The conference was jointly organized by the Faculty of Science, University of Zagreb and Ruđer Bošković Institute, Zagreb.

Topics of the Conference were: cluster structure and many-body correlations in stable and unstable nuclei, clustering aspects of nuclear reactions and resonances, alpha condensate and analogy with condensed matter approaches, role of tensor force in cluster physics and ab initio approaches, clustering in hypernuclei, nucleon-nucleon correlations, nuclear fission, superheavy nuclei, and cluster decay and nuclear clusters in nuclear astrophysics.

Over 70 participants from over 20 countries attended the conference. Exciting new results in the field were presented, both from experiments and from theory, which initiated very interesting discussions and proposals for the future. Once again, the field proved that it is very lively, with the potential to attract young people and new ideas.

The workshop also showed that there is a strong need to stimulate better progress in the field through live meetings and direct communication and open discussions. The value of such meetings for attracting and motivating young colleagues is even greater, indeed priceless.

Therefore, we look forward to seeing many familiar faces, and hopefully new as well, at the sixth workshop in the series, to be held in Japan in 2028, with Masaaki Kimura and Takahiro Kawabata as chairmen.

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