FOREWORD

Our Symposia of Physicists at the University of Maribor, or shortly Christmas Symposia, have an uninterupted tradition since 2002, except for the corona pandemic period 2020-2021, as this year it is already the 20th one. The purpose is the scientific socializing of Slovenian physicists along with the participation of some distinguished colleagues from abroad as our honorary guests. This year we have twelve invited speakers from abroad, from some of the best research groups, so that our meetings remain national with international participation. The meeting is only one of the many activities of CAMTP - Center for Applied Mathematics and Theoretical Physics, which organizes seven series of international scientific meetings. See www.camtp.uni-mb.si

We would like to stress that our meeting is devoted to the entire physics, theoretical and experimental, and also applied mathematics and to all other topics, to which physics is important and closely related, or they are important for physics.

All lectures are on the level of colloquia, thus understandable for a general physicist, and therefore well suited for students, the undergraduate and graduate students. Such general meetings in the field of physics practically no longer exist in the world, although in our opinion they are important for the widening of the intellectual horizon of all physicists. Our colleagues from abroad, the participants so far, confirm our view and appreciate our scientific programme. The meeting is also an opportunity for the young researchers to present their work and discuss it with the experienced scientists. With this activity we also contribute to the promotion and the popularization of physics in our society. We are convinced that it is quite urgent to care about the more intense popularization of natural sciences in our society, and physics plays a key role in this context. All undergraduate students can attend all the lectures of the conference free of charge. In this way we contribute to the popularization of physics and the education in this field.

At the end we would like to stress that our gatherings are an important contribution to the activities of the Faculty of Natural Sciences and Mathematics (Maribor) and the Faculty of Mathematics and Physics (Ljubljana), and of course also for the institutes IJS in Ljubljana and CAMTP in Maribor.

It is our privilege that the general patron of the Symposium is the European Academy of Sciences and Arts (Salzburg). The opening address on behalf of the Academy will be delivered by Prof. Klaus Mainzer of Technical University

of Munich, the President of the Academy, who also is an invited speaker. We shall be 11 members of the Academy present at the Symposium (class IV, Natural Sciences).

In addition to the scientific program and scientific socializing we shall experience two chamber music concerts. On Thursday 14 December the cellist Nikolaj Sajko (orchestra of Maribor Opera and Ballet) and pianist Maja Gombač (Kunstuniversität Graz), both well known musicians, and on Friday 15 December the young String Quartet Al Fine (Ljubljana) will perform for us.

ORGANIZERS:

Prof.Dr. Marko Robnik, Member of EASA, Director of CAMTP and Prof.Dr. Anita Prapotnik Brdnik, FGPA UM