

Opening the 29th Bled workshop “What comes beyond the standard models”.

N.S. Mankoč Borštnik, University of Ljubljana
27th International Workshop “What comes beyond the standard models?” 6-16 of July 2026, Bled Slovenia
norma.mankoc@fmf.uni-lj.si

July 5, 2026

Dear participants, among us also the participants of the earlier workshops ,

These annual workshops started 29 years ago when Holger and myself had a dream to bring together physicists from the field of the elementary particles and cosmology, who are trying to find the answers to the open questions and would enjoy actively discussing these questions in a small group.

Most of workshops took a place in the house of Society of Mathematicians, physicists and astronomers of Slovenia, given by our well known mathematician Josip Plemelj at Bled, in the middle of the mountains.

In these 29 years we have learned a lot, also due to many questions openly discussed in this workshops.

Many of us have tried to develop our own ideas how to describe the laws of nature, how to understand what we observe and what we measure. We understand that we may call physics what we are suggesting, when predictions of our theories and models are confirmed by experiments.

Also this year we expect new ideas, new recognitions, new understandings.

It looks like that **we know almost everything** about our **Universe**, due to the fact that the **theories and models** are to **high extend** supported, at least for very many observed properties in **experiments and the cosmological observations**.

It looks like that **slight differences** might clarify the understanding and solve the open problems.

However, it is also true that **we do not know why and how the universe** has started, what caused the **exponential grow of the size of the universe**, what is happening in the **black holes, primordial or any black holes**.

We namely do not know how to treat the **second quantized gravity**.

We, namely, do not know why we should not understand on the second quantized level all the boson fields in an equivalent way.

There are 40 talks of 34 speakers (some with several collaborators). We all shall appreciate questions that would help to clarify suggestions, potentially solved and open questions.

We all shall learn from questions and answers.