

IUPAP Joint Activity for the Future of Planet Earth

Mankind faces major challenges that endanger civilization as we know it and our future. Global challenges for humanity include sustainable development and global warming, energy, natural resources, pollution, clean water or the uncontrolled development of artificial intelligence. Solving these problems requires scientific research, politicians and decision makers to talk and listen to scientists and scientists raising public awareness. It also requires scientists to learn how to clearly explain their science in a way that can be understood by non-experts.

We live in an interconnected world where complex problems can only be solved in interdisciplinary collaborations and addressing these problems from very different angles. Scientists should therefore learn to think out of their own narrow field and interact with other communities.

IUPAP has an enormous potential to play a leading role in such an enterprise. Its diversity from biophysics to nuclear and astrophysics covers all major branches of physics. Run by the physics community itself, it is independent and free. Each community might not have much impact. But if all branches get together and speak with one voice, it could make a major difference.

In order to explore the interest of other branches within IUPAP for such a joint interaction C19, during the last web meeting, discussed the already mentioned idea to organize a conference where each branch presents what they see as major challenges for mankind, how these problems can be addressed and solved and where there is synergy and joint activities with other communities. These talks require coordinated preparation within each community and they should be presented for non-experts. Panel discussion could help to bring the different communities together.

Pietro Ubertini & Andreas Burkert on behalf of C19

5 June 2023