



The Deepest Mysteries of the Universe

Speech of the President of the Max Planck Society

Professor Dr. Patrick Cramer

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– Check against delivery –

Around the age of 3, children make an astonishing discovery: time. The past and the future slowly take shape. First memories form, and the idea of planning ahead comes to life. What is astonishing: Our brains use the same networks for both. The future is mirrored in the past.

Dear colleagues, dear guests,

That might sound crazy. Yet one thing is even more daring than the human mind. It is reality itself. And reality - that is the business of physics. It starts with the biggest questions. Did time come into being only after the Big Bang? And what does “after” even mean here?

The teams at our new collaboration center are pursuing an extraordinarily exciting line of research. They are creating a new language of mathematics — a language that might even allow us to peek behind the curtain of the Big Bang. And this mathematical language draws its revolutionary power from the idea that it could describe both the scattering patterns of particle collisions and the grand distribution of galaxies shimmering in the night sky.

For anyone wondering whether the groups led by Nima Arkani-Hamed, Daniel Baumann, and Johannes Henn are trying to uncover the deepest mysteries of the universe — or should I say: of all time? — rest assured, that is exactly what they are doing!

IAS, NTU and Max Planck, we will nurture this vision together. The trust between our institutions fills me with gratitude - to you, dear David, to you, Wanjiun Liao - and with a great sense of anticipation. I believe this marks the beginning of an extraordinary journey.

Speaking of bridging scales: This new Center embodies, on a small scale, what the Max Planck Society aims to be on a larger one - a platform for building multilateral networks across continents, from Europe to the entire world.



In challenging times, this goal becomes even more important — and our determination to pursue it grows stronger. One year ago, weeks after the new administration started their attacks on science, we launched our Transatlantic Program. Still this year, we will launch half a dozen new collaboration centers with U.S. partners.

At the same time, we are strengthening our connections with Asia. In 2024 alone, around 100 Taiwanese researchers worked at our Institutes. And we are currently engaged in 20 joint projects with Taiwanese institutions, three of them with NTU.

But whether Taiwan, Germany, or the U.S. — what truly matters is scientific excellence, research integrity, and academic freedom. Let's not forget: Science is a cornerstone of democracy. It is science that strengthens independent thinking, creativity, and tolerance.

Dear colleagues and friends,

I wish our researchers and young talents from all over the world every success on their exciting journey. The world is waiting for your insights. All the best for the future!