



# LINDAU NOBEL LAUREATE MEETINGS

Kuratorium für die Tagungen  
der Nobelpreisträger in Lindau  
Council for the  
Lindau Nobel Laureate Meetings

Lindau, 2 November 2021

## Press Release

### A New Paradigm – Henry A. Kissinger and Physics Nobel Laureates

- Background Material in the context of his new book
- Quantum physics as basis for understanding AI
- Exchange published in the Lindau Mediatheque

On 2 November, the new book of Henry A. Kissinger together with Eric Schmidt (formerly Google/Alphabet) and Daniel Huttenlocher (MIT) is published: *The Age of A.I. – And Our Human Future*. During his research, the Nobel Peace Prize Laureate (1973) also turned his mind to quantum physics – his guess: findings from this field of science could help to understand how artificial intelligence will change our future.

At his request, the Lindau Nobel Laureate Meetings gathered some of the finest minds from the world of physics and technology to discuss the challenges faced by scientists and statesmen of the future.

[Excerpts from this exchange have now been published in the Lindau Mediatheque](#) and may serve as background information, e.g. for discussing the book. Key statements from the conversation are listed below. For the first time, Dr Kissinger also participated in this year's 70th Lindau Nobel Laureate Meeting where his topic was '[Science, Politics and the New World Order](#)'.

#### Henry A. Kissinger:

“For me the philosophical question is: is the reality that we study, the entire reality that we can possibly conceive, or does science take us into – what? Is there an additional reality or an expansion of a reality?”

“If I am right in my perception of the world that artificial intelligence is now [creating], that means it will open a new concept of mysterious reality to us, something we know how to operate but not necessarily how to understand.”

#### David J. Gross, Nobel Laureate in Physics 2004:

“Once we are able to create machines that mimic what we do and perhaps do it better, our understanding of how we think, which is very special about us, I think is going to shake us and change the way we think about reality much more than advances in quantum mechanics.”

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**Henry A. Kissinger:**

“But we have no clue of [the process] by which the judgment is made by the computer. – William D. Phillips, Nobel Laureate in Physics 1997:  
“Exactly, and that’s the problem.”

**Reinhard Genzel, Nobel Laureate in Physics 2020:**

“Enlightenment, Dr Kissinger, is just as right as it always was. If I look at my field, artificial intelligence techniques are beginning to play a big role mainly because of the richness of data sets is becoming ever more astounding. Nevertheless, I would, perhaps somewhat arrogantly, say the best science still comes from detailed specific classical experiments.”

**David J. Gross, Nobel Laureate in Physics 2004:**

“In physics, the test of understanding is prediction. In your life, you also had to predict events based on understanding and thereby test whether you truly understand. Do you agree with that, [Dr Kissinger]?” – Henry A. Kissinger: “I recognise that there is an element of intuition, that people who can shape the future have a sense of where the trend of events is moving – that’s not enough – and have an ability to shape it on the basis of their prediction.”

**Eric Schmidt, former CEO Google/Alphabet:**

“AI is not intelligence. What it is, is pattern matching that’s very, very sophisticated. Whenever you say intelligence, you imply human reasoning skills, human creativity. The current AI doesn’t have that – it may have it in the future.”

**Henry A. Kissinger:**

“I think the quality of 21st century statesmanship is declining – that’s an objective reality, to me at least. Declining in the sense that they cannot master their history, that they do not answer the historical questions.”

**William D. Phillips, Nobel Laureate in Physics 1997:**

“My own feeling is that when I look at the present crop of students, that there are few who are asking those hard questions, the questions that I don’t have any answers for. And those are the ones I value most. And that’s where I think the hope is for the kind of progress, we need to understand the next big questions.”



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“One of those windows [through which we look onto reality] is science, maybe one of those windows ought to be history. And if we fail to look through that window of history, there are features of that reality that we will miss entirely – to our detriment.”

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## About the Lindau Nobel Laureate Meetings

Since their foundation in 1951, the Lindau Nobel Laureate Meetings have developed into a unique international scientific forum. The annual Meetings provide an opportunity for an exchange between different generations, cultures and disciplines. The theme of the Lindau Meetings alternates between Physics, Chemistry or Physiology and Medicine – the three Nobel Prize scientific disciplines. Every five years an interdisciplinary Meeting takes place, while the Lindau Meeting on Economic Sciences is held every three years. Through the medium of various declarations (2020 for Open Science, 2015 on Climate Change, 1955 Against the Use of Nuclear Weapons) the scientists have repeatedly joined in the public debate with political appeals.

It was the Lindau physicians Franz Karl Hein and Gustav Wilhelm Parade who approached Count Lennart Bernadotte af Wisborg with the idea of a conference of Nobel Laureates and proceeded to jointly implement this with him – since 1953 with the participation of young scientists. Some 35,000 students, PhD candidates and post-docs have since taken part. Their experience of the Meeting may be literally once-in-a-lifetime, but they remain permanent members of the Lindau Alumni Network and ambassadors for scientific dialogue.

All year long the Lindau Nobel Laureate Meetings continue to pursue their “Mission Education” aimed at emphasising the importance of science and advocating science and research. This is also the purpose of the Lindau Online Mediatheque as a learning platform with teaching materials for schools.

### Further Information

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