Transcript of the Event:



Welcome address Christian Suhm: page 1-2

Keynote by Jan-Marco Müller: page 3-5

Panel discussion: page 6-18

Questions & answers: page 18-21

Welcome address by Christian Suhm

Dear Claus Müller, dear Tilo Böhmann, dear Jan-Marco Müller, dear Andreas Roepstorff, dear panelists, dear guests here at the Hanse office. On behalf of the Hamburg Institute for Advanced Study, HIAS, it is my great pleasure and deep honour to welcome all of you to the 5th Hamburg Forum for Global Science and Policy, entitled Science and Diplomacy in Times of Disruption, where we are going to discuss the question of how international research institutions need or should adapt to continue successful global science cooperation.

The IAS I am representing is glad and grateful to be part of a series of the Hamburg Forum for Global Science and Policy in close cooperation with the University of Hamburg. After having organized events in Hamburg and Berlin, we are now heading for the European scene. We are delighted to be at the Hanse Office in Brussels and to have our partner institute in Denmark, Aarhus Institute of Advanced Studies, AIAS, among the co-organizers. Many thanks to Claus Müller and his team running the Hanse Office, as well as to the University of Hamburg for a trilateral cooperation on science and diplomacy.

Science and Diplomacy, in the following abbreviated SD, is a cross-cutting issue that lies at the heart of the Hamburg Institute for Advanced Study, and at the international stage of many Institutes for Advanced Studies worldwide. HIAS, as a non-profit association, has 10 Hamburg Institutions, among them 6 public universities in Hamburg. The University of Hamburg in particular supports HIAS in many respects, especially by financing advanced fellowships in the context of Germany's excellence strategy and is one of Germany's excellence universities.

Further member institutions of IAS, like DESY, the German Electronic Synchrotron Accelerator, and GIGA, the German Institute for Global and Area Studies, complement HIAS strongly for international cooperation on science and research. Recently, the University of Hamburg's Institute of Peace Research and Security Policy and HIAS announced a co-fellowship for the academic year 27-28, focusing among other topics on the European security architecture and the future of European security. More concretely, SD is HIAS' daily business, when hosting an international group of scholars year by year, connecting them with cooperation partners in Hamburg and elsewhere, enabling them to

collaborate inter- and transdisciplinary, and encouraging them to combine diverse perspectives.

A couple of months ago, HIAS also joined the EU Science Diplomacy Alliance. From the European angle, and with respect to the recently published and adopted European Framework on SD, it seems worthy to highlight two aspects of the SD work at HIAS and many other institutes of advanced study on our continent.

First, when it is about strengthening Europe as a powerful and dynamic player in the competitive global game for the advancement of science and research, one should take into account dozens of institutes of advanced study in Europe as the ideal places where SD is already well-placed and deeply rooted in the Institute's charters. Besides, Institutes for Advanced Study perfectly fit the European Framework's appeal to diplomacy in science as the fourth pillar of the concept of SD, and to conceiving of SD as a craft and practice.

Second, Institutes for Advanced Study have a natural tendency to practice Science Diplomacy - not only against the backdrop of a politically turbulent landscape in which only a few competing poles in a multipolar world exist, but also at levels where mutual understanding and the willingness to cooperate are essential, and science and research are not dependent on political uncertainties.

Both practices of SD are not easy to realize and come at a price. On the one hand, the visibility of European IAS, their expertise in, and their capacities for SD need to be acknowledged and should be ranked highly on the EU's agenda for supporting and advancing SD. On the other hand, funders and stakeholders of IAS are to be further sensitized to the needs of IAS for utmost academic freedom, diversity of research cultures and methods, and the priority of fundamental and open-ended research over political or societal demands.

It is only under such conditions that diplomacy *in* science flourishes, and SD, so understood, may help recall the most noble traits of Europe's academic and scientific history.

Thank you very much for your attention.

We are now looking forward to a keynote and an interesting discussion.

Keynote by Jan-Marco Müller:

[...] And this all happens at the same time when we have fundamental tectonic shifts in technology. Artificial intelligence, quantum, etc. But it's not just the digital technology. Think of the mRNA vaccines during the pandemic. Think of gene editing and all these other technologies that triggered a new tech race between nations. And then there's the third element, which we sometimes forget, and it's still there. It's the tectonic shifts in our planetary life support system, it's climate change, it's biodiversity loss, it's pollution of our oceans especially. All of this coming together at the same time.

And what it all means is that research and innovation have become a geopolitical currency. And you see this everywhere: The tech race between nations and regulations, the global fight for talent, but also big infrastructures, which classically was, who has the biggest accelerator, the biggest telescope. That was about scientific excellence. Now it is also about geopolitical ambition, about data sovereignty, about competitiveness etc. Now science must learn to navigate these tricky geopolitical waters. And in fact, what we're seeing in recent years is that science increasingly is stepping on the diplomatic stage. Through the creation of institutions, such as the International Science Council, or the Executive General Science Advisory Board. And by having discussions around research security, around geopolitics on our university campuses.

And then there's another issue, that is that science is increasingly under pressure, by governments and by movements that are quite simply anti-science. We see this all over the place. Of course, you know all the examples, I don't need to tell you. And let's be clear, this didn't start with Mr. Trump. I just remind this guy in the Brexit debate... It's a trend that has been ongoing for quite some time and which is increasingly putting pressure on academic institutions and academic freedom. Trying to defund science, hollow out state agencies, etc.

But we tend to forget that actually diplomacy is under pressure as well. Why would you need diplomats when you solve your problems by launching missiles or by launching social media posts in capital letters? We see a lot of disarray ongoing also in international diplomacy.

That means that actually scientists and diplomats, we are sitting in the same boat. Both of us have an interest in a functioning international rules-based order. But bringing science and diplomacy together is not easy. I've seen it when we developed the EU framework. It starts with the fact that scientists and diplomats don't even agree on what Europe is. They have different mindsets, they speak different languages, they have their technical jargon. Getting a debate going between the two is actually not so straightforward. That's the reason why, when we developed the EU framework for science diplomacy, we physically locked the scientists and diplomats into a room and told them, please talk to each other, understand each other, and come up with joint solutions, come up with joint recommendations. For this, it was really crucial to have them in equal

numbers in the room. And we had to set up a few working groups, and each working group had a scientist and a diplomat as co-chairs. We kind of forced them to work together.

And the result of this - most of you will have seen - was this report, which was published last year, and which includes the recommendations of these working groups. It has now been transformed into a policy document, which was adopted on the 29th of May in the form of a council recommendation. Why a council recommendation? Because it needs to be owned by the member states. Because after all, foreign and security policy is a national sovereign issue. It's a recommendation, it is non-binding, legally non-binding – but it is forward-looking. The idea is to bring everybody on the same page and to create a common framework, which needs to be built. This is not yet a strategy. It's a framework which needs to be built by the scientific and diplomatic actors together.

The member states are scratching their heads now and thinking, okay, what does it mean for me? Where do I want to put my emphasis, my priorities? I don't have the time now to go into the actions and recommendations. You can read this for yourself. But I just want to pick out the objectives, which you find in this council recommendation.

Why is it that we actually do EU science diplomacy? The first thing is safeguarding and promoting the Union's democratic values, strategic interests, and technological and data sovereignty. And that's a paradigm shift in science diplomacy. Let's be very clear about it.

This is not anymore just about keeping the doors and the communication channels open. This continues, of course, being a very important element of science diplomacy, without doubt. But it is actually about defending and standing up for our interests, for our values. That needs to be seen in the context of this geopolitical scenario in which we are. Of course, we want to use science diplomacy to promote ourselves as a science and technology actor, but also to help foster an open and secure international scientific environment for scientific cooperation. And that's where research security comes in. We shouldn't see science diplomacy as about being open - and research security as about being secure. Actually, both of them need to be about being open and secure. We need to have a dialogue, it's a continuum.

But science diplomacy has some other elements, which were introduced by the member states in their negotiations. It is also about enhancing trust in science, about fostering the uptake of foresight in scientific advice and decision-making, about promoting public engagement. This, of course, tackles the issues that I mentioned earlier around science being under pressure.

Then, of course, it continues to be about promoting peace and human rights and multilateral human rights-based international order, and also to deal with all these unresolved issues about how are we going to govern and manage global public goods and commons, such as the ocean or outer space, defy the threat of planetary crisis, climate change, fight against exhaust pollution, and how to achieve the Sustainable Development Goals.

What does this mean for research institutions?

Research institutions have to be aware that their research may have geopolitical consequences, be they positive or negative. We are not operating in a vacuum here and a nice ivory tower up there. In the current situation, whatever we do is ultimately very political. We need to be aware of this. Geopolitics are not a distant issue; right now, they are already inside the fence of your organization, whether you want it or not.

Just think of the discussions which we have on university campuses around Gaza, or the U.S. or China influence, or whatever you may think of. So be aware that you cannot evade the debate. You need to deal with it.

But what is important, we need to create the structures needed to enable researchers to take informed decisions on whether to engage in a cooperation or not. This is not about restricting cooperation. And ultimately, it's up to the individual researcher to decide, do I want to enter into this cooperation or not. But we need to give them the tools needed to take an informed decision. And that's what is happening already on the research security side, because I cannot expect from any researcher, whether he or she enters a cooperation with China, to know whether this partner may have some connection with the Chinese army or whatever. And I think we need similar structures also in science diplomacy.

We need to engage with policymakers, with diplomats, with citizens. And this includes the ones outside our eco-chamber. I know that this is not easy, because we always like to preach to the converted, and have to talk to the parliamentarians, as shown in our parliamentary evenings in our labs. But it's actually the people who vote for them. These are the ones we need to convince. Speak up, stand up, gang up for science and for academic freedom.

Let's face it: science is under attack now. And I think we need to deal with it and stand up for it. And diplomats can help us with this. Because diplomats have similar interests. They can help us in defending our values, the ones we as scientists believe in, which are fundamental to international cooperation.

And finally, never lose faith that science is going to make the world a better place.

Thank you.

Panel discussion:

Andreas Roepstorff (AR) (Moderator): ... I would also thank all the other organizers here for setting up this event, and all of you who have decided to spend an evening discussing science diplomacy. For me, as the previous speakers have pointed out, it is one of the most important topics for us as researchers, but also for civil society: to think about how we engage in a situation that is clever, careful, open, and innovative in these particular topics. And to discuss that, we have an amazing panel with us today.

On my right is Nela Riehl, who is a representative in the European Parliament for Hamburg and also chairs the Committee on Culture and Education in the Parliament.

We have John Gyapong, who is an esteemed epidemiologist, and epidemiology—we all know now—is a global phenomenon. It really requires science diplomacy and diplomacy of all sorts, and inserts itself directly into that field. But John is also representing ARUA, which is the African Research Universities Alliance, and will be speaking from both of these positions.

And then we have Frank Lehner here on my left, who is also both a physicist and a representative of DESY, the German Electron Synchrotron, which is one of the largest scientific infrastructure installations in Northern Europe and houses an amazing number of researchers from all over the world, trying to deal with basic questions in physics. But, as we know these days, basic questions in physics are also about security issues.

And finally, Maria Rentetzi, who is both a researcher, originally trained in physics, but has worked for many years in science and technology studies and the history of science. But Maria is also one of the chairpersons of the European Science Diplomacy Alliance, which brings together researchers and other institutions.

So, in a sense, everyone around the table has more than one position to speak from. And I think this makes it such an interesting panel.

What we will try to do is have two kinds of rounds, with everyone responding. The first question is really trying to speak from, what does the world look like right now from where we are speaking. And then, in the second round, we try to do a kind of double perspective shift. We try to see it from the future and imagine: how would my position look like from the outside - in the future?

Nela, I would like to begin with you. What is science diplomacy? Why is that at all important for someone working on culture and education?

Nela Riehl (NR): It is super important, it's more important now than ever. But first of all, thank you very much for the warm welcome. I was not only born and raised in Hamburg, but I also studied at Hamburg University, so I really feel very much at home here.

So, why is science diplomacy so important? As a first step, I'd like to give you some insights into the Committee on Culture and Education (CULT), where we, of course, discuss science, where we, of course, discuss research, and also education.

We do have the far right in our committee, and they are turning things around. Like you rightly said in the introduction: We need to talk to the voters. The voters are like people in this committee. They are sitting there and telling us straight to our faces that *we* are the ones who are promoting ideologies, that *we* are the ones who are not working science- and fact-based. This is always a bit funny, when we have to argue that we actually *do* rely on facts and *they* aren't. This sometimes almost feels like kindergarten.

So, what do we do in the Committee on Culture and Education? I'd like to shift the focus a little bit to Erasmus Plus, a program you all know, because I do think this is one of the really strong soft diplomacy tools that we have right now, and that is working. It's not only for students—it's great for students, of course—but multiple generations of academics - researchers, professors, teachers - have been able to take part. This is where we need to strengthen it. We are right now negotiating the new Erasmus Plus framework for 2028 to 2034. We are trying to put more money into that, because we really do believe this is more important than ever: to have this, just like cultural relations, exchange between academics.

Of course, we have very much welcomed the new framework for science diplomacy. I think it's the first time that we actually have a common language. That is super important. From my discussions with academics, I do want to reiterate what has been said here: We really need to make sure that we keep the openness for science. This is really crucial. Right now, we see kind of a shifting away from the people-to-people approach within science, which is academics engaging with each other, and a shifting more towards security. This is a super important issue, but in our committee, we try to make sure that we keep the worth of exchange very much alive. This is something that I'd like to emphasize here.

In general, we see a world that is changing. We do also see that, in science, we need to cooperate much more with the rest of the world - and here I mean on eye level. We need to seek partners such as Canada. I hope the associate membership that Ursula von der Leyen mentioned two weeks ago will also mean exchange in terms of Erasmus. But we should also look to the Global South, countries in Africa, and we would very much like to engage on eye level with each other and strengthen our relationship here.

AR: In a sense, science is also a culture in itself. Where does it find a balance between being, on the one hand, very elitist and, on the other hand, being kind of an open playing field where the best argument can come from many different directions?

NR: That's exactly the openness I tried to emphasize that we still need. And that's also kind of a balancing act, because it's super important for me as a politician to never ever have political influence into science. This is really something that needs to be the basis.

This should never be discussed. But this is what we are discussing in the committee right now. That's what I meant. Our job, I think, is also, with this science diplomacy framework, to actually keep the ground open for exchange.

AR: John.

John Gyapong (JG): First of all, thank you for having me here. It's a good opportunity to share my thoughts from my perspective. And, as you indicated, my perspective could come from being an epidemiologist and also somebody representing the African research universities environment.

I think it goes without saying that all the issues the keynote speaker referred to in terms of the disruptions are much more present on the African continent than we find in Europe and other places. But our concern is that, in many of the discussions, the issues about Africa become more of an afterthought than being at the centre of the co-creation of the solutions that we are looking out for. We end up in the small prints. After everything has been talked about, then they ask: what about Africa?

I guess maybe we also haven't been proactive enough in raising the issues from our perspective. And the truth is that unless you speak, nobody speaks for you. Or, when they speak for you, they may not represent you the way you would want to be represented.

I have seen—and many of you are very much aware of—the data out there which tend to indicate that Africa contributes less than one percent of scientific knowledge. But whose definition is that? And that has become the narrative, and that is what everybody speaks to. When it comes to many of the issues about linguistics and epistemology and all that, we tend not to look at it from our perspective. Probably because we have not described it from our own position. I think that we, as a continent, need to step back and begin to articulate the issues from our own perspective. And we need to see many of these issues as coming from multipolar perspectives, so that our point of view can also be around the table during the discussion.

On the issue: Recently, our president was at the UN General Assembly, and he had a side meeting which has gone viral in the last couple of days, about why Ghana declined to receive the US health compact. I was privileged to see the compact, and I asked myself: Why on earth would anybody draft such a compact for us to sign? Some of the key things in there are unbelievable: All drugs and supplies that would come from the US to Ghana, the Ghana Food and Drugs Authority would have no reason to question them, and they basically must be admitted into the country just because they are sent from the US. We are supposed to provide a profile of—our disease profiles!—to the US government. We are supposed to make our health records available to the US. Who sends his health records to anybody? For what reason? And for how much money?

You know, so these are some of the issues which, if we don't engage and articulate our position properly, we get neglected, and we are seen as small change.

I believe sincerely that we need to engage in science diplomacy in a way that is, first of all, respectful of the African continent—and also not just respectful, but we, as a continent, need to bring something to the table.

These would be my initial moments.

AR: In much of the 20th century, science liked to portray itself as a kind of value-free view from nowhere. But, of course, thanks to the work by Maria Rentetzi and other historians of science, we know the story is a little bit more complicated, that science has also been very much part of a particular set of power structures, as you described it, this kind of extraction. It is not just extraction of resources, it's also extraction of knowledge. Is there any hope at all for creating for the 21st century, an idea of science that still stays with the norms of science, but where we're not falling into the trap that part of science was caught in in the 20th century?

JG: I think it is possible if we put our minds to it and decide to work together to achieve those specific goals. It is a tall order, but not impossible.

I've had the opportunity to look at the AU-EU Innovation Agenda, which articulates, in a very good, systematic way, how to try to achieve some of these goals. But how much are we putting in to achieving this goal? I see the document as being well articulated, well thought through, but the implementation itself, what goes back to its implementation, is what, in my opinion, is not very clear.

AR: Now, Frank, you have very much your fingers right in the middle of these things here. What does it look like at DESY?

Frank Lehner (FL): Thanks for joining this panel. It's a pleasure. So, maybe I start with where I am from, DESY. It was mentioned: it's a national research lab. We are a member of the Helmholtz Association, which is the umbrella organization in Germany. We are building and operating large-scale research facilities, accelerator-based, but also observatories in the South Pole. And a core feature is really that we have, every year, at DESY in Hamburg, about 4,000 international scientists coming, doing research in our experiments, coming over. And this is basically the daily life: that we have to run this international cooperation, that people come here. There are cooperation agreements, institutionalized data-sharing agreements, we have to watch for the FAIR principles and all this.

We have to look also sometimes, of course, for dual-use issues. If it's a technology-sensitive item, we have to do export control. These things are basically our daily work, our operational work. And so, this is basically the view I take here, it is more practical. I'm not talking as an analyst or as a science diplomat, but from a practitioner's view. This is what I can bring to the table here during this discussion.

I would like to raise three points which are for us at the moment major points in this discussion.

This is number one: I think research facilities as ours are still a place where people can go and exchange their views, and where there is really international cooperation going on across borders. These facilities are not only generating knowledge; they are also facilities that generate trust; they are infrastructures where researchers can come together. I think that's really the basis. The scientists and their countries are not always allies with each other, but they come together in their shared, common goal. They have long-term agreements, maybe a common vision on something to find out in science. This is something which you don't always have in political systems, especially if governments change. I think that's really something very positive.

And we see also in history prime examples for this. CERN, for instance, founded after the Second World War when Europe was in ruins, instantly brought together the scientists. There is also another example where we have close relationships: SESAME in the Middle East where people and scientists from Israel or Palestine, from Iran, from Jordan come together on experiments. It's really a kind of amazing example of a project that works.

The second point I want to make: What has moved much more into the centre of our attention of our daily life at these facilities, is research security. Everything which is needed to make research open, but also secure, this now has moved into the centre. Ten years or so ago, it was marginal only. You did collaboration because you looked for scientific excellence, you looked for merit-based research. But now you have to look for partners, you have to do some background checks, you have to understand if there are critical items coming with that partnership, if there are risks or dual-use issues involved in that etc. That is something institutions need to learn and adapt to. You need a certain organizational adaptability for that.

If you don't have the capacity at your institution set up for that, either you over-regulate out of fear, or you do a kind of under-protection out of naivety. You have to find a balance, and it requires also support at your institutes for that. Competences and structures are needed, so that the institutions can keep their autonomy in deciding on their cooperations.

The third point I want to make is—which I struggle with personally, but also many others at the moment—is a bit the limitations of science diplomacy when it comes into a hot conflict, into a war, which we have in Europe at the moment, where we have a large-scale invasion on Ukrainian territory. At DESY we have about 100, maybe 150 Russian scientists. We had, even before the fall of the iron curtain, close ties to excellent institutes in Russia. We always had good cooperation, but we have stopped all of them with the Ukraine invasion. We have stopped this. This was a political decision. The question now is if science diplomacy needs also a balanced view on that. It needs some differentiated response. What does it mean? What type of cooperation do you suspend in times of a hot war? What do you keep open? These are complicated questions.

And even more complicated is maybe: When can you start opening it up again? I'm not talking about individual contacts, I'm talking about institutional contacts, where you can reach out maybe at some point, if at all. In the long term, I'm convinced that sanctions will not help. I support the sanctions that we have at our institute, but in the long term, I think we will end up harming science. We also have to discuss this. For me, it's also part of the truth of science diplomacy that we run into a limitation. These are my points for now.

AR: So, just to follow up on this question of infrastructure, because we might think of infrastructures as being primarily machines. But I think the picture that you paint, and that we also see at the Institute for Advanced Studies, is that these infrastructures that kind of transcend the individual researchers and have some permanency over time are also really important sites for maintaining a particular culture and for creating possibilities for doing collaboration. So they are more than just machines.

FL: They are more than just machines. They have their own life, and people are there to run and operate them, as well as conduct experiments. As long as people share a common goal and vision for what they want to achieve in science, you have sustained cooperation. That's good. I think people can come together in a trusted environment. I think this is also a fantastic example. I mentioned SESAME, for instance, in the Middle East, where you can really reach something with states and member organizations of this facility which normally do not talk much, or if they are even in conflict. It's a great example of something that could work.

AR: Maria.

MR: If you ask a historian... *(laughter)*... you get a kind of historical perspective on this question.

I started working on science diplomacy almost ten years ago. It was the time that the EU announced three major projects on science diplomacy. I participated in one of them. When we finished in 2021 these projects, we decided to set up the EU Science Diplomacy Alliance. I'm saying this just to let you know what the Alliance is, how it came about, because you mentioned that this year, I'd chair this, together with Caspar Anderson. So, I have been working on science diplomacy from two positions: As a researcher, I have been doing historical research on Cold War science diplomacy, especially nuclear diplomacy. And then also I started participating in what ended up being policy advice. And I'm thinking that this panel today has this function as well. So, I'm not here as a historian, but as someone who is experienced in advising on policy, based on the research and the knowledge I have from my own field.

I did this during what I want to call the renaissance of science diplomacy. Some people call this the naive field of science diplomacy. I don't think that any of us that had worked on these periods ever thought that this was a naive position. We were optimistic, and we were optimistic that we can connect, that science diplomacy will build bridges—because

this is what science does: to build bridges, to have an international role, and all this discussion.

This is gone. I mean, if you ask us what it is today, and how we look at science diplomacy today, all of this is gone. Open a newspaper. I was reading the *New York Times* this morning. There is a wonderful interview by Mark Carney from Canada, where the whole discussion is how we diversify, how we decouple. I was asked three years ago, to my surprise, to participate in a meeting, even during the Biden administration, at the Munich Embassy. There was something like 20 people, and the discussion there was all about decoupling from China. And the answer was: But you cannot decouple, it's too late to decouple from China. When I was a student in the US, 20-something years ago, most of the students were Chinese and not American. So, how can you change all this?

The metaphor we have been using through this naive—or renaissance—period is that science diplomacy builds bridges. Now, based on the discussion that we have had until now, we have to change this understanding. We have to find another metaphor to describe what is happening. And I was really thinking hard: what else can replace this? I want to stay within the engineering field, and I came up—I'm not sure whether this can hold or whether this is a good idea—but I came up with the idea that science diplomacy is kind of a damper.

A damper is this device, this artefact, that in mechanical systems absorbs all the shocks, the destabilizing forces. And I think this is what science diplomacy is trying to do right now. This is the way I see that the EU framework works right now, and this is what the EU Science Diplomacy Alliance is trying to do. Even in cases of extreme disruption—what science diplomacy can do is to maintain the bridge. The bridge is already there, and we have to find ways to maintain this bridge, to maintain the connections, and make sure that even in hot wars we can still have some dialogue and exchange.

I believe that we were too fast in 2022, as the European Union, to decide, the next day after the war started, to put sanctions. And the very first sanctions that we put were on science and technology. I think we learned something out of it: that we have to be more careful, we have to think more seriously about how we can react in these kinds of cases.

This is how I see science diplomacy today. And I think both the EU framework and the Alliance have a strong power here. What are we as an Alliance? We are a network of different institutions, universities, and what we can offer is—they're all kind of a damper in this period.

And just a comment on what John said before: We keep saying, "science was open, and now we have to think about security, how to navigate in these difficult times." But if you ask the Africans, was science ever open for them? What John has been describing is not an open science. If you have to give your data back to the US because you receive, I don't know, medicine or whatever, this is not open science.

So, maybe it's time to think also about what we mean by open science—historically, and in the times that we are living in.

[…]

MR: How I started doing research about science diplomacy? I have to give you an anecdote: I wanted to study the International Atomic Energy Agency. I had an ERC grant. I knocked on the door and said, "I'm here. I want to do archival research." They said no. After some negotiation, they said, "Maybe you can come once a month." But if you're a historian, once a month is nothing. It's like being told you can use an accelerator once a year—it's simply not enough. So, I pushed further and asked, "How can I come every day? Because this is how historians work." They said, "You have to go to the ambassador of your country." I said, "I can go to the president of my university." I was in Vienna at the time. And they said, "It's not going to help. You need the ambassador to give you a letter saying that this research is very important." That was the very first moment when I realized how closely science and diplomacy are connected. And when I started doing my research, I realized that this goes much further back in history.

So, the whole discussion we're having today is about the fact that we are living through times of disruption. But this is not the first time we have experienced such a period. Consider the Cold War, for example. If we want to find answers to this very important situation, we also need a historical perspective.

AR: I think we're kind of mapping out the situation where the idea that science is just about openness and completely separate from a world of security and secrecy—neither of these two columns is really that simple. And now they are becoming increasingly intermingled, which means there is a need, and a space, for diplomacy to unfold somewhere in the middle.

But if we were to look, let's say, ten years ahead—in the best possible world—what could it look like from the outside? What would Europe look like from the outside?

NR: Ten years? I don't know if you can say that. [laughter] Well, I do want to be very optimistic. I do think that by then we will have managed to stop pretending that we are living in a bipolar or unipolar world. We need to accept that, as Europe, we are living in a multipolar world order. In five or ten years' time, I hope we will have managed to engage in partnerships on an equal footing. As I said before, which also means investment—in terms of money. I'm also working on the Global Gateway file in the European Parliament. And here, I'm trying to make sure that education is seen as a real cornerstone. As John mentioned before, it shouldn't just be an afterthought, because that's where we are right now. It's often like, "Oh yeah, this is also a nice-to-have." We need to move away from that. So, in five or ten years' time, I hope that we will really invest in global partnerships—be it with Africa, Latin America, or Canada, for sure. That's one thing.

I also think that we, as the European Union, should be very clear about our role. Of course, we are the ones protecting the rules-based order right now, together with Canada and other partners. But this is something we need to make sure by then. And that's not a given, it's something we need to work for. I mentioned the European Parliament before, and the work in our committee.

Generally, I also hope that there will be an open exchange between scientists and us as politicians, because I think this is where we learn from each other when it comes to frameworks like these. I think this engagement is really important, really valuable. And we also invite you—or all of us together—to really stay in contact. Let's look ahead: What do scientists actually need? What role can they play with political interference? Because, again, that is a danger that I do see.

So, I hope that by 2031, 2036 or so, Europe will be one of the leading—not powers in the world, but cornerstones of the world—making sure that there is free science.

AR: And what would people from outside Europe see when they look at Europe?

NR: I hope they would see innovation—a science-friendly place for innovation, engagement, and cooperation. I think that's super important. They would see that Europe is one place in the world where they can always come, and that we are committed to making sure that science remains free. They can come here, they can do their studies, but we are the ones who don't give in to the Donald Trumps or Boris Johnsons of the world. We will make sure that this remains a place of freedom, and that we are here to engage with you on an equal footing.

AR: Thank you. – John?

JG: Yes. I envision that, in the next five or ten years, despite all the challenges we see, we will have an environment that produces high-quality knowledge and addresses shared problems. And one that is also able to influence policy, build institutional capacity, and generally be of public value. The science that we do should address many of those issues. But it must be built on mutual trust and scientific integrity, so that, at the end of the day, there is transparency in our governance systems and in all of that.

And finally, we also need to make sure that our partnerships are enabled in a very positive way, especially by having African institutions around the table when these discussions take place, so that we can facilitate the co-creation of all the things I was talking about.

These are some of the things I want to envision for the distant future. Because, for now, what we see is not really reflective of that. We see this kind of zooming in, helicopter-style research: you come in, collect data, move away, and… Many African institutions participate because they feel they have no other option. And I don't think that should be the case. In the instance that I mentioned before, I can tell you about a number of African countries that have followed that path. I'm sure many of you are aware of them. They signed because they thought there was no other option.

AR: A good South African colleague of mine gave Europe some advice. He said, "When your systems begin to fail—and we can see that they are failing—you should come and ask us, because we know your systems. We know when they fail, and we sort of know how to deal with them."

So, what is it that we in Europe are looking at when we look at Africa? What would that look like from our perspective?

JG: What will Africa look like?

AR: That African perspective. What are we looking at here?

JG: The way I understand it is that we want to see a Europe that is very transparent and puts all the cards on the table when issues are being discussed. But the reality is that in diplomacy, maybe we keep some cards close to our chest. So, as much as that is what I wish to see, I also recognize that there are challenges when it comes to diplomacy. So I'm not entirely sure what it will look like.

You referred to South Africa. I'm sure you know about the challenges South Africa has recently faced around immigration issues, which have also affected diplomacy between South Africa and many other African countries. It's not just about Africa and Europe. Even within Africa, there are challenges that we all need to address.

AR: Thank you. – Frank, will there be a DESY in ten years?

FL: We will always be doing research, and you need these machines. You have to look at the smallest and the largest scales when you study the universe.

In five to ten years…, it's difficult to say, of course, but there are different scenarios. One could be that some of the existing infrastructure continues to be developed. Or it could be multiple beamlines, with different, variable geometries. I think, at least from my perspective, that in Europe, with these ideas about science diplomacy and the way we are now approaching international cooperation, there is a lot of opportunity. And I think Europe has a lot to offer. With these approaches, I think we can create something that other regions might look to us for. You mentioned equitable partnerships, for instance, and co-creation. It's not simply that we ask African researchers, "Okay, you can use our beamline." It's more than that. We have to really sit together with them and decide what the beamlines should look like. I think that's what we need. And we have to make good offers for it. Then I think we can really have global cooperation that also addresses the needs and challenges we actually have to deal with. I'm optimistic in that respect.

In Africa, I think there's also a real opportunity. There's a good initiative, the African Light Source Initiative, where many researchers in Africa are now thinking about these kinds of facilities and working towards their own synchrotron organizations, also addressing local and regional problems, their own infectious diseases, and so on. And I think the best thing we can do is really work together with them to make this happen and turn it into reality.

AR: Maria?

MR: It sounds like a question at a job interview… This is the kind of question you get: "Envision your research in five or ten years." And it's probably the most difficult question you get.

I'm seeing three major differences, on three major levels. One is the institutionalization of something—and I'm going to explain what I mean by that. The second is education. And the third is research.

Institutionalization means that we take this very nice framework and turn it into a strategy in the member states. The major conference coming up is next year in Athens. We've discussed this several times. I'm Greek, and for me it's important that my own country also adopts this framework, but then does something more concrete with it. As Jan Marco was saying before, we need more concrete action.

Also, when I talk about the institutionalization of science diplomacy, I mean that when governments or the European Union decide to set up a committee on a scientific issue—I was reading about AI, because everyone is focusing on AI—they form committees with scientists. But there is no science diplomat there, someone who can contribute to these discussions from a different perspective. For me, that could be what institutionalizing science diplomacy means.

Education**.** It's not enough to have a future program on science diplomacy at several universities. For me, the most important thing is to integrate science diplomacy perspectives into different master programs, and even into bachelor programs. We have this at FAU, Friedrich-Alexander University in Germany, and I think we are among the first to do it. We have a new elite master's program in Earth System Science, and one of its major pillars is going to be science diplomacy. This is what I want to see in the future: that science diplomacy becomes part of our education. I think this is the only way we can really change things and educate the next generation. Jan Marco, I'm referring to you here. In your talk, you talked about the different languages that scientists and diplomats speak. And I think this is the only way we can find a kind of Creole, probably, to resolve this issue.

The last one is research. We need more research on several levels—historical, political, you name it. But we also need funding for that research. So, ideally, in the future, we will have all three of these dimensions further developed.

AR: One of the human rights, of course, is the right to science, or the right to reap the benefits of science. But it also seems that, from the discussion we've had here, the kind of science—or the kinds of science—we are talking about may look somewhat different from what we knew in the 20th century. It's participatory. It acknowledges that science is also political and embedded in structures, and it might even speak Creole. For most scientists, the idea is that you should speak a clear, clean language. So, is that the kind of vision we have for what science might look like?

MR: I was watching CNN today. And I saw that Elon Musk launched the Starship, the most powerful rocket. And NASA was observing it, and everyone was discussing it. The launch was today at three o'clock. So, is this science? It's happening outside universities. We, those of us who work in universities, are not the only powerful institutions producing science. Science is already different. Who is Elon Musk, launching rockets into space? So science is already different. We have to start from these background assumptions.

And then, looking ten years ahead, what I want to see is how we regulate these kinds of efforts—not how we open them up even further and have more corporations getting involved in this kind of scientific and knowledge production without regulation.

AR: Thank you.

So, I think we have time for a few questions from the audience. If any of you have a question, we have a microphone that can come around. And please introduce yourself, just so we can appreciate who you are.

Marcelo Knobel:

My name is Marcelo Knobel. I'm a proud member of the board of HIAS. I'm originally from Brazil, but I'm now the Executive Director of The World Academy of Sciences, a UNESCO office located in Trieste, Italy. If I may, I'd like to add a bit to what has already been said. We're not going to have much time, but I think there are two essential components that we should put on the table.

The first is talent. If we take Africa, for example, we have to remember that science is not made only of resources. We also need talent to do it. And in a few years, the vast majority of the younger population will be in what we call the Global South. So, for Europe, it is a strategic move to cooperate equitably with Africa and with other regions, including Latin America. And perhaps, from a Latin American perspective, to really be able to compete in these spheres. Because without talent, you can't do much. So that's one point.

The second point is communication. In my opinion, higher education institutions, scientific institutions, and science diplomacy are failing to communicate to society why science is important. Science and education, as was mentioned before, are fundamental for the future. If we don't connect directly with the public, we are failing, because society is making political choices based on very different ways of seeing the world. As I mentioned, I come from Brazil. Next week, we will have elections there for president. I can't say who I will vote for, because I'm for science, and so everyone already knows who I'm voting for. [laughter] This is the kind of division we are seeing now: pro-science and anti-science. And it's crazy to see this happening when we are in 2026. So, this is something that we should make a top priority when it comes to communicating with society—in our projects, in our way of working, and in the way we do science.

Andreas Roepstorff: Do you want to comment on this, John?

John Gyapong: I think you raised a very important issue about capacity development in the Global South. There is a lot going on. However, I agree with you that we need to be a little more focused and develop much more capacity through collaborative research. The African Research Universities Alliance is a partner in The Guild of European Research-Intensive Universities, and we are doing quite a bit in this area through our programs on research excellence, building much more capacity among African scientists.

The big challenge, from my perspective, is retaining the capacity that we build. We've moved from brain drain to brain circulation to whatever… What I tell people is this: When I was in medical school, there were 32 of us in my class. One has passed away. Of the 31 remaining, only three of us are in Ghana. So, use whatever term you want. That is what I know. How to address that issue? It is a human issue. Many of us come to Europe or the US for postgraduate training. And if you train as a cardiologist in the US, then you go back to Ghana, the facilities you need to practice effectively as a cardiologist simply don't exist. So it's a multifaceted issue. But until we address these challenges, retaining the capacity we build is going to be very problematic, irrespective of how many people we train.

Nela Riehl: Taking up the matter of communication. I think that's very interesting, because it's something that we as politicians are also facing. I want to reiterate that it's super important, even though it's not easy—especially for scientists—because you have to be louder than those who offer easy solutions. And that's something we need to work on. People don't necessarily like it. They don't like this very differentiated approach: there are pros, but there are also cons… This is something that you as scientists will have to become better at. This is my call to you: to do that. Maybe we should all learn together how this actually works—how can we be louder than those who are shouting out the easy solutions, while still being appropriately precise in our answers.

Maria Rentetzi: The EU Science Diplomacy Alliance has been doing exactly this. One of the things we've been doing is offering seminars where we educate anyone who is interested in the intersection of scientific and diplomatic affairs. This is a space where people can work on these kinds of questions and find answers. People from business can participate, scientists can participate. These are the kinds of spaces where you can learn and discuss how we navigate these disruptive times.

Andreas Roepstorff: Maybe I can add something to that. There is a science diplomacy theoretician called Anna-Lena Rüland, and she recently wrote a paper in which she identifies three different modes of operating in science diplomacy.

The first is the instrumental mode. This is probably the one we know best: science is being used for something—for competition, competitiveness, or whatever the particular goal might be.

Then she says there is another area that was a more classical part of science diplomacy, and that is the epistemic dimension. It is really about the question: How do we create knowledge that is better than it otherwise would have been? And that epistemic dimension should never be forgotten. It's difficult, but that's precisely why you need different perspectives in the team—not only when it comes to the smaller things that happen within a project, but also in terms of understanding how a dialogue unfolds.

And then she argues that there is a third aspect to science diplomacy, and that has to do with agency and the agenda. It means that researchers should acknowledge that they have some agency of their own, and that society should acknowledge that this can actually be a good thing. It's probably an example of that: deciding not just to do your research, but also to recognize that there are implications of it that connect not only with research, but with other issues as well.

So, for me, this is a really useful way of thinking about it. Science diplomacy can be instrumental, it can be about creating better knowledge, but it's also about acknowledging that researchers and research institutions have a space for agency of their own. I think that's really important.

Andreas Roepstorff: Here, please.

Jan Palmowski: Thank you. Jan Palmowski from the Guild of European Research-Intensive Universities.

Jan Marco Müller started with the premise of the international rules-based order and how we can use this to do science diplomacy better. But Mark Carney, as he reminded us in Davos, said that, in truth, this international rules-based order was also deeply imperfect. So, if we think about that extended dimension—about how we can use science diplomacy to make what we do better—my question would be to the policymaker, Nela Riehl.

I love the way you highlighted Erasmus+, and I completely agree with you. But we're dealing with a Commission that disregards its own fifth pillar of the Global Gateway, which is about research and education. So, how can we really help them? How can we urge them to do this differently?

And for us scientists, are we pushing ourselves enough to really bring about fundamental change? You mentioned the Middle East and Africa in terms of research infrastructures, but frankly, the power of research infrastructures is in the Global North. And when we think about technology infrastructures and the AI factories that are being built everywhere, they are all in the Global North. So, how can we really push ourselves to use this conversation to bring about change?

Nela Riehl: Difficult question. Thank you very much, because I'm always dealing with this in the Commission, of course. I personally tend to be a bit more progressive than the Commissioner, but I really ask you to engage with the Commission, and also to engage within the Parliament with other political groups, and to really illustrate how important

this is. Of course, they hear my voice, but if they hear your voice as the experts on the ground, they tend to trust you more than other political groups.

So, I do think it's really important that you engage, and engage, and engage again and again, even if you have the feeling that it doesn't lead anywhere. But still, be there, be loud, and say it again and again. I think that's the only way right now. I must say that I personally was a bit disappointed by the State of the Union speech by Ursula von der Leyen two weeks ago, where, of course, these topics weren't even touched upon. Erasmus was mentioned as a nice anecdote, but I do think that this sets the scene for where we are right now. So, you need to be vocal on that, and here I also count on you, that we are just allies in this.

Maria Rentetzi: To respond to your question from the side of the scientists, and to give you an easy answer to a very difficult question, I would say: create space. As an individual scientist, create space for people coming from outside Europe. I mean, you asked us about ten years from now. I forgot to say that I want to see a Europe that is very inclusive. We don't create spaces for people coming from places like Africa. I really spent a month filling out forms in order to make it possible for a scientist from Cameroon to visit us in Germany. Spend the time. There is no other easy way to change what you just said: that, indeed, the Global North has the power and the Global South doesn't. So, our power is on an individual level, to change this as much as we can.

Andreas Roepstorff: Christian, you get the final word.

Christian Suhm: Thank you very much. It's amazing to see how rich the scenario for a renaissance of science and diplomacy is that you present to us. Many aspects were already touched on in the discussion, but when it comes to the question of how to integrate large parts of the world that we usually call the Global South, we should also think about what scientists and scholars from these countries tell us when they come to an institute for advanced study and cooperate with people in Europe. What they usually say is: It's good to have Africa on the agenda, and it's good to have a science diplomacy strategy that does not only take into account China and the U.S. and so on. But what we really need is a kind of context- and region-sensitive way of doing research. Not just seeing Africa as one continent, as one block that we have to integrate, but seeing whether our research on, let's say, AI in sub-Saharan countries, IT infrastructure, medical plants, or whatever, has to be taken into account from country to country, from region to region. And then it gets very, very specific what to do with these sorts of science collaborations.

Perhaps a very naive idea would be to have diplomacy and science in the sense of good old diplomacy, where you take into account the specificities of countries and regions, and where it's about bilateral and trilateral cooperation, and then see what we can do. And therefore, we do not only have to host people from other continents in Europe, but we have to go there and see what they are after, and what their problems in science and research are. So, it has to be a kind of mutual and respectful course of cooperation.

Andreas Roepstorff: We are coming to an end of the panel. I will take the chair position here to try to give an answer that might lead us on.

From a diplomacy point of view, we are clearly living in a multipolar world. This is the kind of world that we need to engage with. We don't know exactly how many poles are going to be there. We don't know exactly what it even means to be a pole in that world, but it's more than one, and it's more than two, whatever the state of affairs may be. So, that's the challenge on the diplomacy side.

And it seems, coming out of this panel, that the challenge on the science side, on the research side, is that it has to be a multi-perspectival science that somehow exists in this world. It's a science where, whatever topic you're looking at, different perspectives somehow need to coexist without it falling into any kind of absolute relativism. And I think that is a challenge for us as researchers: to figure out how we live with that kind of perspectivism that is both carried by people and by different traditions.

I think the challenge that you give is not just a challenge to the diplomats. It's also a challenge to the researchers, to figure out what science would look like under those circumstances, where we are living in a multi-perspectival, multipolar world. But the alternative to thinking through science, seems not to be a good one.

(Applause.)