

**Doctor Honoris Causa – Figures that matter – 2 April 2019**

**Speech by rector Caroline Pauwels**

Dear honorary doctors,

Dear Mr. Alsteens,

Dear Mr. & Mrs. Durie,

Dear Mr. Rosling,

Dear Mrs. Chemla,

Dear Mr. Seshaiyer,

Dear Mr. Van Ostaeyen,

Dear Mr. Dijkgraaf,

Esteemed Ambassador to the Netherlands,

Esteemed Ambassador to Sweden,

Esteemed Ambassador to Ukraine,

Esteemed delegation of the embassy of France,

Dear Rector Van de Walle,

Dear Rector Van Goethem,

Dear colleagues, dear students,

Ladies and gentlemen,

What a beautiful day for VUB for this 2019 Doctor Honoris Causa celebration. I stand here, in front of you, humbled and honored by your beautiful presence.

Figures that matter.

That is the theme of our 2019 honorary doctorates and of today's awarding ceremony.

Actually, it is more than a title or a theme: it is a mission.

It is a mission to make a difference.

Today, we will award seven honorary doctorates and 9 titles to top scientists and personalities who definitely made a difference and still do.

An honorary doctorate is more than a mere decoration.

It is also a token of connection.

Between what the laureates stand for and what the university stands for.

Honorary doctorates are always a two-way street.

For our university, this academic year is dedicated to the beauty, the power and the wisdom of science.

We confirm this in the presentation of the honorary doctorates, which we relate to figures, data and research results that matter.

The figures and drawings of one of today's laureates also matter.

They encourage us to think critically.

Dear honorary doctors,

Figures, data and research results, in other words science and a scientific approach and mindset are the most valuable weapons we have to fight fake news and alternative facts,

to fight climate change and global warming denial – and of course to fight climate change itself -

and also to fight populism – two weeks ago the elections in

our neighbouring country the Netherlands were won by someone who considers the universities as enemies of the people.

The man of course is also a notorious climate denier.

And yes, he is successful, as so many others across Europe and the globe, with more or less the same story.

Should we be worried?

Yes, we should, but we also should be optimistic.

Science and scientists have been the driving force of human progress since the scientific revolution 500 years ago.

This is not going to change.

There's simply no alternative for science.

It cannot be replaced.

Not by religion, and not by the denial of what is proven or what is plausible.

Science matters, figures matter, but science is not only important and powerful, it is also beautiful.

Today, we honour three mathematicians and in an interview on our university website they were talking – among other things – about the beauty of mathematics.

Mathematics as an art form.

There is a Hungarian mathematician - Paul Erdős – who has a famous quote on that.

“Asking why numbers are beautiful is like asking why Beethoven's ninth symphony is beautiful. If you don't know why, nobody can explain it to you. ”

(That's what he said.)

Well, I hope our mathematicians will be able to make us understand the beauty of maths in the next hour.

Even though most of you are already convinced, I guess.

What holds for mathematics, indeed holds for science in general. Science and beauty make a perfect pair, they ultimately lead to truth. This is reflected in the maxim of the Princeton Institute for Advanced Studies: 'Truth and Beauty'.

And I cite the head of this institute, the Dutch mathematician and physicist, Mr. Dijkgraaf, honoured here today: 'I believe that beauty, defined as profound esthetical feeling, is a compass that guides many great scientists. Truth is a process, beauty a kind of intuitive direction indicator.'

By the way, I'm very pleased that one of our math laureates is a woman, and I was also delighted that for the first time a woman got the Abel Prize, which is in fact the Nobel prize for mathematics.

The Norwegian Academy of Science and Letters awarded its Abel Prize for 2019 to Karen Uhlenbeck of the University of Texas, for the fundamental impact of her work on analysis, geometry and mathematical physics.

Ladies and gentlemen,

Everybody knows we need more mathematicians and exact scientists, and therefore it is important, very important, that more girls, more female students get attracted to STEM studies.

Science, Technology, Engineering, Mathematics.

We will be discussing more STEM and STEAM – the A stands for Art - during the ceremony.

We will also talk about bone marrow cancer or Multiple Myeloma and the importance of world wide scientific networks,

we will talk about science communication and the importance of science popularization and science ambassadorship,

we will talk statistics and how animated graphics can help us to understand what's going on in our world and how graphs show us that it's getting better all the time,

yes, we'll be talking facts and factfulness - ,

and of course we will talk about critical thinking and the importance of the freedom of speech and expression.

We will award four honorary doctorates following the initiative of the Faculties of Medicine and Pharmacy, Arts and Philosophy, Engineering, and Psychology and Educational Sciences, and three following the initiative of the academic authorities.

*(gericht naar de eredoctores op de eerste rij)*

Brian & Susie Durie

Freddy Van Oystaeyen

Karine Chemla

Padhu Seshaiyer

Robbert Dijkgraaf

Hans Rosling (posthumous), together with his son Ola Rosling & daughter in law Anna Rosling Rönnlund

Gerard Alsteens

You're about to receive the title of Doctor Honoris Causa of our university, Vrije Universiteit Brussel.

It is a great privilege for me and for the university to honor you all. As from today, you enrich our university, and we are very grateful for that. I wish all of you a beautiful ceremony, the start of shared memories and future encounters.

Thank you.