Honorary Doctor of Science
Professor Wendelin WERNER

Citation written and delivered by Professor Paul LAM Kwan-sing

Mr Pro-Chancellor:

When Professor Wendelin Werner was a schoolboy in France, he was one of those to whom the notion that the universe was probably infinite served to stimulate rather than intimidate his maturing intellectual curiosity.

So it should be no surprise that by the late 70s, Professor Werner was starting to ask his teachers mathematical questions about infinite sets of rather unusual complexity that they had to delay responding to until they could get home and look up the answers in books!

Those school teachers who had no problems with first acknowledging that they did not know the answer, but were then able to provide it after carefully reading about it at home, were among Professor Werner's earliest champions as they showed to him that some questions that are easy to formulate sometimes call for a lot of study. He went on to study at École Normale Supérieure in Paris, received a doctorate from the University of Pierre and Marie Curie in 1993, and became professor of mathematics at the Université Paris-Sud in Orsay in 1997. Since 2013 he has worked at the Swiss Federal Institute of Technology (ETH) in Zurich. He is a Member of the French Academy of Sciences, the German Academy of Sciences Leopoldina, and the Berlin-Brandenburg Academy of Sciences. In addition, he is a Foreign Member of the Brazilian Academy of Sciences and an Honorary Fellow of Gonville and Caius College at the University of Cambridge.

Widely considered one of the most significant mathematicians working today, Professor Werner has been awarded many prestigious prizes. In 1998 he was awarded the Rollo Davidson Prize at the University of Cambridge. In 1999 he was awarded the Doisteau-Émile Blutet prize from the Academy of Sciences in Paris. In July 2000 he received the European Mathematical Society prize at the European Congress of Mathematics in Barcelona. He was awarded the Fermat Prize in 2001 by The Toulouse Mathematics Institute, the Loève Prize at the University of California, Berkeley, in

2005, and more recently the Heinz Gumin Prize of the Carl von Siemens Foundation in 2016.

But perhaps the most prestigious award was the Fields Medal in 2006. It is worth mentioning that no other mathematician working on probability theory had ever been counted among the recipients prior to 2006.

Professor Werner chiefly studies natural continuous random structures that arise in statistical physics or theoretical physics and that turn out to be connected with rich mathematical abstract theories. An example of such random structures is the random shapes that emerge in a physical or chemical system at the critical moments when a medium changes from one state to another, for instance when water heated to boiling point turns into vapour. These shapes arise as interfaces between the different phases, such as water and gas.

In collaboration with other scientists, Professor Werner has enriched our knowledge of such structures and systems. In his citation for the Fields Medal in 2006, his work has been acknowledged for contributing to the "development of stochastic Loewner evolution, the geometry of two-dimensional Brownian motion, and conformal theory".

Born in Germany but raised in France among scholarly parents and siblings, Professor Werner chose science and mathematics as a career despite other available avenues. Quite by chance, Professor Werner won a role in the 1982 French movie *La Passante du Sans-Souci (The Passerby of Sans-Souci)*. Professor Werner had no particular intentions of a career in acting, and he won the role partly because he is an accomplished violinist, a skill that the role demanded, and because, he says, he was not actually that enthusiastic about the role. However, his apparent indifference won over the director, and he landed the role. While on set, he actually was as much interested in the lighting and camera work as the acting.

And so movies gave way to mathematics, and the world of science is forever grateful!

Mr Pro-Chancellor, Professor Werner is an acclaimed mathematician, one who has achieved a great deal at such a comparatively young age. We welcome him to the CityU family and hope that this connection will lead to more fruitful collaborations and exciting areas of research. For these reasons, I present to you Professor Wendelin Werner for the conferment of a Doctor of Science, *honoris causa*.