

Laudatio Valérie Masson-Delmotte door Roderik van der Wal

We are living in a time where climate is rapidly changing. This is not a surprise to the people in the audience here, but it is nevertheless a message which we need to repeat also outside the academic setting because it has implications for society. For that reason, I am very pleased that Utrecht University has decided to award Valérie Masson-Delmotte a honorary doctorate. As co-chair of the working group on the physics of the climate system from the Intergovernmental Panel on Climate Change she is privileged to discuss science in the public arena. At this point she is as bright as the star she admired as a youngster watching the sky providing the basis for her scientific eagerness. She has matured the skills to translate complicated concepts in a way that people understand it. Not only colleagues, but also journalists, and children as her books demonstrate, and last but not least also policy makers who have to be convinced on the content of the summary for policy makers of an IPCC report. Her patience, but above all her persuasiveness combined with her knowledge are a pleasure to be confronted to. She thereby serves as a role model for scientists, and is deeply engaged with the societal importance of climate research. Starting her career in paleoclimate research and fluid mechanics she worked on the interpretation of ice cores a field which is critical in climate science as it showed us already 30-40 years ago the empirical evidence of the relation between carbon-dioxide concentrations and temperature. Carbon dioxide concentrations which were much lower than the current values and which are still continuing to rise. This work provided the empirical evidence of the relation between temperature and greenhouse gases, which we already understand for more than 100 years from the physical interaction between radiation, the atmosphere and the Earth surface. The basic knowledge is not new anymore, but the big question is how the additional energy in the system is distributed and how that impacts climate, weather patterns and all associated phenomena. This is still very topical and at the heart of the debate, and critical because it impacts society. Warming ocean water affects the corals in Australia, the flooding on the Pacific Islands, the hurricanes, heat waves and droughts in other parts of the world. The work Valérie is doing and overseeing as a co-chair of the IPCC, contributes to this understanding and underlies political negotiations on emission reduction targets. It is an approach which is very much along the lines set out by the strategic research theme Pathways to Sustainability of Utrecht University where the emphasis is currently on transdisciplinary research towards a sustainable society. Along a similar path one can argue that her work follows the philosophy of Utrecht University attempting to be a World class university, where contributing to the societal debate by solid research is a key theme and where rigor meets relevance. Universities play an important role in this societal debate and we can all consider Valérie as a brilliant star providing guidance on the

directions to take. As such it is a pleasure for me to award you the honorary doctorate of Utrecht University. $\ \ \ \$

Professor Roderik van der Wal