

**Laudatio by Frank den Hollander for the honorary doctorate of
Jennifer Tour Chayes, Leiden University, 8th February 2016**

Jennifer Chayes is a world-renowned researcher, working at the interface between mathematics and physics. She has made profound and groundbreaking contributions to our understanding of cooperative behaviour and phase transitions in interacting particle systems and complex networks. By bringing together concepts and ideas from both disciplines, she has opened up vast new panoramas.

Jennifer was a graduate student at Princeton University, held post-doctoral fellowships at Harvard University and Cornell University, and was professor at the University of California Los Angeles. In 1996 she was approached by Bill Gates and his team to set up a Theory Group at Microsoft Research Redmond, an academic think-tank with the task to address scientific problems of great challenge. There she brought together some of the brightest minds in mathematical physics, and proceeded to lead what was to become one of the world's foremost research centres in her field. In 2008 and 2012 she moved to Boston and New York City, establishing research labs of equal renown, this time extending her horizon to computer science, economics and the social sciences, and systems biology. She is currently Distinguished Scientist and Managing Director of Microsoft Research New England and Microsoft Research New York City.

Jennifer has not only gained respect for her masterful combination of views from different disciplines, she has also inspired two generations of young researchers to pursue a career in science from a broad perspective. In addition, as one of the leading female scientists in the US, she has been a role model for young female researchers wondering whether a career in science is compatible with everyday life. She has supported them in their decision throughout.

Jennifer has been awarded many prestigious prizes. She is member of the American Academy of Arts and Sciences, National Associate of the American National Academies of Science, Engineering and Medicine, Fellow of the American Mathematical Society, Fellow of the Association of Computing Machinery, and recipient of the John von Neumann Lecture Award, the highest distinction offered by the Society for Industrial and Applied Mathematics.

I have always felt inspired by Jennifer's radiant personality, her drive and her courage, and with me many colleagues in The Netherlands. The honorary doctorate conferred on her today by our university marks a further high-point in her brilliant career, which will continue to take her beyond many horizons.