

“Thank you” speech presented at the Royal Society December 1, 2005 for the Descartes Communication Prize Award ceremony.

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It is a breathtaking experience for me to be here today. It is with great pleasure that I thank the *European Commission for Science and Society* for making this happen and the *Danish Ministry of Science, Technology and Innovation* for the nomination.

The year 2005 has been a festive year for physicists around the world. To honour the International Year of Physics we have all been focusing on how to raise the public's awareness of physics and its importance to our daily lives. It is my hope that we have been at least partially successful in conveying the message that the contribution from physics to other sciences is essential for solving global problems such as energy supply, environmental protection and public health.

My interest in astronomy began when I was 13 years old. In school we had an astronomy student visit several times during the physics lessons. He told us about stars, planets and galaxies. I was completely thrilled by what I heard and started to spend time watching the night sky. To look at the Moon or one of the planets with a pair of binoculars is stunning. To watch a globe floating in space, knowing it is huge although it looks so small and that it - in an astronomical sense - is close by, although it really is far, far away.

Once my destiny was set, my journey to become an astronomer began. As most journeys turn out it has been both fun, interesting, educational, and complicated and at the same time occasionally really tough. Juggling a family life along with the many short-term postdoctoral positions in different countries has been a challenge. But, it has also provided valuable experiences, personal as well as scientific.

My main research interest is cosmic dust. In contrast to what some of us experience at home, the Universe as a whole is not very dusty. You may therefore wonder why astronomers place so much emphasis on dust—something, which almost isn't there. The reason for this is twofold. One is the complication that dust causes for observations. Just a tiny density of dust along the line of sight can completely blur the image because of the vast distances. This has caused many astronomers to wish that the dust wasn't there at all! But the tiny amount of dust present is crucial for forming complex molecules such as amino acids, sugar and alcohol, and most likely also for the formation of planets. Without the presence of dust grains, forming planets like Earth might not have been possible. Fundamentally, without this dust, life—as we know it, at least—would not have been possible.

Being passionate about astronomy public outreach comes naturally. I have been sharing my research interests since I was an undergraduate. I find it flattering that other people are willing to spend time trying to understand what I am so excited about. Listening to their questions often provides me with a useful overview of what

it's all about. As I have gotten older my public outreach activities have also contained a not very well hidden agenda. I aim at getting young women to realise that physics is much too important to leave entirely to the men!

I have often been advised by older colleagues to stop or at least to scale down my public outreach and gender activities. It was considered the wrong priority if I really was serious about participating in a highly competitive research field. It is not quite clear to me why I didn't take their well-intentioned advice, but I think one reason is that I enjoy doing public outreach too much to stop. While I was applying for positions I often cursed myself for spending time on writing popular papers instead of scientific papers. It seemed that having a public outreach profile was often considered more a disadvantage than a benefit.

This is why receiving the 2005 Descartes Prize for Science Communication is very dear to me. Today I do not feel that way.