

# Uncertainty Guidances in Science and Public Policy

13–17 November 2017 @ Snellius

## Science

This workshop brought together natural scientists, social scientists and philosophers – as well as practitioners who use scientific information to tackle real-world problems – to discuss how uncertainties in science can best be communicated both among scientists and to public decision-makers.

The workshop reviewed Uncertainty Guidances for treating uncertainties in science and public policy, and their practices of use. We discussed principles for the responsible use, provision and design of scientific information – in particular on climate change – for policy use and decision-making. Important questions were tackled on how to deal with expert judgment and model probabilities.

Besides having formed a new network of individuals that would like to continue to interact (and that will be expanded with people who couldn't make it to the workshop), the workshop outcomes include a set of Lorentz Principles that will be publicized and research and editorial articles that will be linked to these principles. An LSE-UCL web page will be used to do this. Also, the organizers will pay a visit to the leadership of the climate science working group of the Intergovernmental Panel on Climate Change (IPCC), to advise them on how to best proceed in dealing with uncertainty.

An interesting result of the workshop was that while we came from different disciplines and topical backgrounds (even though there was a bias towards critical evaluation of climate models), we independently came up with similar proposals for statements to be included among the Lorentz Principles while we hadn't decided to have a consensus around these. We had a diverse group of people who contributed what they thought was relevant, and then there clearly emerged agreement, at least on the themes (the specific wordings differed). A main example was the use of 'downscaled' climate information: this should always be explicitly justified following expert guidelines.

## Organization/Format

We were able to have a high level of participation by not programming too many too long presentations. Only a few presentations were pre-programmed and all participants received the opportunity on the first day of the workshop to very briefly present their interests and potential contributions. What also worked well was to have participants submit text overnight (Thursday to Friday) for inclusion among the Lorentz Principles. Furthermore, there was a very active sharing of presentations and papers via a joint Dropbox folder that we set up for the workshop. On the whole, we had a sufficient number of moments to collectively take stock and fine tune the program so that we would ensure to reach an optimal outcome. So the risk that we took (of not knowing exactly beforehand what we would be doing) paid off.

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**Nigel Harvey** (University College London, United Kingdom)

**Arthur Petersen** (University College London - STEaPP, United Kingdom)

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