

Call for Papers

**Estimated Truths: Water, Science, and the
Politics of Approximation**

Workshop, 16-17 August 2017

Department III, MPIWG – Max Planck Institute
for the History of Science,

Boltzmannstr. 22, 14195, Berlin, Germany

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The scientific legibility of the world is often produced through approximation in a variety of guises. Planning efforts in particular, which are often subject to pressing time and budget constraints, tend to eschew absolute truths in favor of estimated values that promise a sufficient level of precision. Water flows and levels, for instance, have often been assessed by scientists and engineers through processes of estimation, simulation, and modelling. More often than not, the construction of authoritative knowledge in the field has been based on values that were deemed to be good enough for the task at hand.

The central question this workshop seeks to answer is: how have scientists produced informed judgements about rates of flow, changes in level, processes of condensation and precipitation, thickness and deformation of ice, and other dynamic properties of water in its different states through processes of approximation, simulation, and modelling? In exploring this issue we want to pay particular attention to the relationships between politics and science and the role of power structures in determining choices and decision-making processes. At the same time, we want to remain attentive to the ways in which the material properties of water and the larger biogeophysical systems into which it is embedded shape the kinds of knowledge that are produced. We want thus to address the dynamic, processual nature of planning and research, characterized by constant flows in which both data and judgements are produced, validated, and reassessed through mediation and conflict.

We focus on water as both an exemplary case in which the variety of variables produces an inherent degree of uncertainty and as an issue that allows broad comparisons between different eras because of the centrality of water, water management, and knowledge about water throughout human history. By attending to constraints, failures, and approximations, we aim to understand how the autonomous dynamism and complexity of biogeophysical processes serve as structural sources of uncertainty, as well as how approximations become sites of political contestation and impact power structures at multiple levels. We are particularly interested in exploring spatially and temporally diverse case studies whose foci may range from the use of science in water management, to the role of models in hydrology and related disciplines, to the standardization of water measurement systems. Our interests include but are not limited to the conditions of knowledge production in the field and in the laboratory, the advantages and disadvantages of simulations and models, and the significance of approximation for decision-making and policy.

With this workshop we aim to lay the foundation for a well-integrated publication around the idea of estimated truths about water as a co-product of science, politics, and the environment. We thus invite potential contributors to explicitly address how their research reflects the issues described above. Draft papers and a preliminary introduction will be pre-circulated to maximize the time available during the workshop to discuss these issues in detail. Travel and accommodation costs for participants will be covered by the MPIWG.

Your proposal should consist of an abstract (ca. 300 words) and a brief biographical note (ca. 150 words). Please submit proposals to whardenberg@mpiwg-berlin.mpg.de by **15 December 2016** with the subject "Estimated Truths."