The global environment is an idea that permeates the loosely connected cluster of disciplines referred to as environmental or earth sciences. From the second half of the 19th century onwards, geology, meteorology, climatology, oceanography, ecology, and seismography, among others, have shared a common commitment to obtaining images and representations of the earth at the supra-anthropic scale. It is the scale of global circulation models, systems ecology, the biosphere, Spaceship Earth, and "big data". This workshop seeks to write the human scale back into the history of the global environment by looking at individual and collective ways of experiencing nature in the work of practitioners in the environmental sciences.

There are at least two fundamental ways in which experiences of nature coevolved with the global environment. First, practices of data gathering confronted practitioners with perceptions of their local environment mediated by new technologies. This opened the way to new phenomena, from previously unheard sounds to newly discovered entities, such as radioactive minerals. Second, notions of an interconnected, global environment provided new conceptual frameworks with which to interpret and give order to particular experiences, from climatic variations to earth's tremors.

In this workshop, we would like to turn our attention to the ways in which individual and collective experiences of nature have been transformed within the environmental sciences. The "body of the artisan" has at times been assumed to fade before the immensity of planetary sciences. Acknowledging the presence of experience in the production of sciences of the global promises new ways of exploring this blossoming field. While the question of how local practices gave way to global knowledge has been central to the history of science and related fields in recent decades, we endeavor to focus on the coexistence and coproduction of local perception and sensory experience with global universal models and frameworks.

# MAX-PLANCK-INSTITUT FÜR WISSENSCHAFTSGESCHICHTE Max Planck Institute for the History of Science

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#### Illustrations:

front: Roald Amundsen on skis, 1909;

back: U.S. Surveillance Station, Teufelsberg, Berlin ; inside: Camille Flammarion, "L'Atmosphère: météorologie

populaire', 1888: 173.

flyer design: Mala Shah

# Experiencing the Global Environment

February 4 - 6, 2016

Max Planck Institute for the History of Science

Organization: Lino Camprubí, Philipp Lehmann



# Thursday, February 4

15.00 Welcome and Introduction

# 15.30-17.15 Exporting and Enlarging the Field

**Jeremy Vetter** Experiential and Cosmopolitan Knowledge: The U.S. Bureau of Biological Survey During the Railroad Era

**Emily Brock** The Inconvenient Richness of the Philippine Islands: Tropical Forest Commodification between the Local and the Global

**Etienne Benson** Sensor Networks and the Transformation of 'the Field' in the Environmental Sciences

# 19.00 Dinner for presenters at Restaurant II Gattopardo



# Friday, February 5

#### 09.00-10.45 Scales of Climate

Philipp Lehmann Sensing the Weather and Collecting Climate Data in Colonial Africa

Dania Achermann & Matthias Heymann
Negotiating Epistemic Shift: From Human-Scale
Climatology to Global-Scale Climate Science

Mark Carey Ice Cores, Time, and the Re-envisioning of the Global Environment

Coffee Break

# 11.00-12.45 Bounding Spheres

**Giulia Rispolli** Rethinking Boundaries: Soviet Cybernetics across the Biosphere, the Ecosphere, and the Noosphere Dimensions

**Javier Pérez-Jara** The Oblivion of Nature as Nature in the Anthropocene Epoch

**Sebastian Grevsmühl** The Local in Global Environmental Images

#### 12.45 Catered Lunch at MPIWG

# 13.45-15.30 Submerged Environments

**Helen Rozwadowski** 'Homo Aquaticus', Evolution, and Knowing the Ocean in the 1950s and 60s

Lino Camprubí A Global Underwater Ear: Collective Experience and Historical Perception

**Nils Hanwahr** Mediating Ocean Environments Through Satellite Tagging of Marine Animals -A Recent History

#### Coffee Break

### 15.45-17.30 From the Ground Up

Daniela Ruß An Analysis of the World Power Conferences' Minutes

Conevery Valencius Hydraulic Fracturing and Induced Earthquakes in a Small Southern U.S. State: Local Hunches, Global Science, and the Underground Connections Between Them

**Elena Aronova** Seismic Sensors vs Animal Senses: Earthquake Prediction With and Without Models in the Second Half of the 20th Century

# Saturday, February 6

# 10.00-11.45 From Global to Local?

Sabine Höhler Local Disruption, Global Condition: El Niño as Weather and as Climate Phenomenon

**Ruth Morgan** Experiencing Global Phenomena in the Eastern Indian Ocean

Elaine LaFay The Character of the Wind: Climate, Public Health, and the Body in the Antebellum U.S. Gulf Coast

#### 11.45 Catered Lunch at MPIWG

#### 12.45-15.00 General Discussion

Lorraine Daston Hans-Jörg Rheinberger