CLIMATE ENGINEERING
RESEARCH SYMPOSIUM 2015

Current State and Future Perspectives

// Schedule

July 7 – 10 // 2015 // Berlin
BERLIN-BRANDENBURG ACADEMY OF SCIENCES AND HUMANITIES
BERLIN-BRANDENBURGISCHE AKADEMIE DER WISSENSCHAFTEN

Priority Programme 1689 of the German Research Foundation DFG
TUESDAY // JULY 7

09:00-12:30 Engaging Pupils in the CE-debate – A Role Play (German only)

12:00-13:00 Snack
13:00-13:30 Welcome remarks by Andreas Oschlies (GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel)

13:30-17:00 Session 1 ‘Scientific Feasibility of Climate Engineering Ideas’
   Chairs: Thomas Leisner (Karlsruhe Institute of Technology), Klaus Lackner (The Earth Institute Columbia University)

13:30 Introduction // Klaus Lackner
13:55 Cirrus Cloud Thinning // Jon Egill Kristjansson
14:20 Model Simulations of the Potential for Stratospheric Ozone Loss under Conditions of Enhanced Water Vapour and Sulphate Aerosol // Rolf Müller, Bärbel Vogel, Simone Tilmes

14:45-15:15 Coffee Break
15:40 Delivery Systems for SRM // Hugh Hunt
16:05 Low Climate Potentials but large Side-Effects of Terrestrial CO$_2$ Removal – Insights from Quantitative Model Assessments // Lena Boysen, Vera Heck, Wolfgang Lucht
16:30 The Role of Iron during the Open Ocean Dissolution of Olivine in a Simulated CO$_2$ Removal Experiment // Peter Köhler, Judith Hauck, Christoph Völker, Dieter Wolf-Gladrow
16:55 Potential Consequences of Element Release from Enhanced Weathering // Thorben Amann, Jens Hartmann

17:20-18:05 Poster Pitch 1 + 4

18:05-19:30 Posters from Session 1 + 4*

* small snack and beverages will be provided
WEDNESDAY // JULY 8

09:00 - 12:30  Session 2 ‘Exploring Climate Engineering Uncertainties’
// Chairs: Gregor Betz (Karlsruhe Institute of Technology), Ulrike Lohmann (ETH Zürich)
09:00  Keynote by Ulrike Lohmann commented by Gregor Betz
09:40  Investigating the Uncertainty of Simulated Climate Engineering
// David Keller, Andreas Oschlies
10:00  Is there a Limit of Sulfate Injections for Climate Engineering?
// Ulrike Niemeier
10:20 - 10:50  Coffee Break
10:50  Exploring the ‘Termination Shock’
// Andy Parker, Peter Irvine
11:10  Atmospheric CO₂ Stabilization by Means of Ocean Alkalinization within the 21st Century
// Miriam Ferrer-Gonzales, Tatiana Ilyina
11:30  Synthesizing Uncertainties
// Johannes Lenhard, Martin Carrier
11:50  Impact of SRM on Preferences for Mitigation by Application of Cultural Cognition
// Matthias Honegger

12:10 - 12:30  Poster Pitch 2+5
12:30 - 13:30  Lunch Break

13:30 - 18:00  Session 3 ‘Governing Climate Engineering Research, Potential Development and Deployment’
// Chairs: Alexander Proelß (Trier University), Edward A. Parson (Emmett Institute on Climate Change and the Environment)
13:30  Minilateral Governance of Solar Geoengineering
// Joshua Horton
14:00  Strategic Conflicts on the Horizon: R&D Incentives for Environmental Technologies
// Daniel Heyen
14:30  Leveraging a Solar Climate Engineering Patent Pool for International Regulation of Field Experiments
// Jesse Reynolds
15:00  A Survey of Dynamic Games in the Exploration of Global Geoengineering Governance
// Weili Weng, Ying Cheng
15:30 - 16:00  Coffee Break
16:00  The Role of Human Rights in Considering Climate Engineering Research
// Michael Thompson, Will Burns, Brian Citro, Patrick Smith
16:30  Regulation of Radiation Management: Uncertainty and Incentives
// Wilfried Rickels, Martin Quaas
17:00  Understanding the Slippery Slope Argument against further Climate Engineering Research
// David Morrow

17:30 - 18:00  Poster Pitch 3
18:00 - 19:30  Posters from Session 2, 3 + 5*
19:30 - 20:00  Understanding the Intangible: Perceiving Climate Engineering through Art and Design
// Josh Wodak
THURSDAY // JULY 9

09:00-12:30  Session 4 'A Comparative View on Climate Engineering Options and Assessment Metrics'
// Chairs: Hermann Held (University of Hamburg), Jon Egill Kristjansson (University of Oslo)

09:00  Review of the Climate Impacts of Sulphate Aerosol Injection
// Peter Irvine

09:20  What is the Best Measure of Justice in Climate Engineering Assessment?
// Duncan McLaren

09:40  The Normative Evaluation of CE Techniques
// Harald Stelzer

10:00  Cost–Effective Integrated Mitigation and Solar Radiation Management Scenarios under Uncertainty
// Hermann Held, Marius Stankoweit, Hauke Schmidt, Elnaz Roshan

10:20-10:50  Coffee Break

10:50  Simulated Impacts and Side Effects of Multi-Centennial Climate Engineering
// Andreas Oschlies, David Keller

11:10  Comparative Assessment of Land-, Ocean-, and Atmosphere-Based Climate Engineering using the Max Planck Institute Earth System Model
// Sebastian Sonntag, Miriam Ferrer González, Tatiana Ilyina, Julia Pongratz, Christian Reick, Hauke Schmidt

11:30  Climate-Effective Terrestrial Carbon Dioxide Removal could Induce Biogeochemical State Shifts
// Vera Heck, Lena Boysen, Dieter Gerten, Wolfgang Lucht

11:50  Integrated assessment of mitigation and carbon dioxide removal technologies
// Jessica Strefler, Elmar Kriegler, Florian Humpenöder, Nico Bauer, Ulrich Kreidenweis, Alexander Popp

12:10  Panel Discussion

12:30-13:30  Lunch Break

13:30-17:30  Session 5 'Perceptions of and Perspectives on Climate Engineering Research and Deployment'
// Chairs: Katrin Rehdanz (Kiel Institute for the World Economy), Jack Stilgoe (University College London)

13:30  Geoengineering as Collective Experimentation
// Jack Stilgoe

14:00  Solar Radiation Management and Intergenerational Equity
// William Burns

14:30  Climate Intervention in Africa: Perspectives based on Analogies from International Conventions on Response to Climate Change
// Mary Mutiso, Rose Akombo

15:00  General Discussion

15:15-15:45  Coffee Break

>>>>

<<<<
THURSDAY // JULY 9

15:45  Does Knowledge of Stratospheric Sulphate Injection Change Individual Efforts to Mitigate Climate Change?
// Christine Merk, Gert Pönitzsch, Katrin Rehdanz

16:15  Responsibility and Governance in the Climate Engineering Discourse of Science and Policy
// Nils Matzner, Daniel Barben

16:45  What if we could Cure Climate Change?
// Tim Kruger

17:15  General Discussion

17:30-17:45  Closing Remarks by Andreas Oschlies

17:45-19:00  Light Dinner Snacks

19:00  Public Event “Pointing Science”

FRIDAY // JULY 10

9:00-17:00  Preparation 2nd SPP-Phase, Breakout Sessions
Please contact the conference office for available rooms for ad-hoc meetings.

9:00-15:00  Perspective Matters-Young Scientist Workshop
The Young Scientist Workshop will take place next to the Berlin-Brandenburg Academy in the premises of the ‘Deutsches Klimakonsortium’ (Markgrafenstraße 37, Room 102)
VENUE
BERLIN-BRANDENBURG ACADEMY OF SCIENCES AND HUMANITIES
BERLIN-BRANDENBURGISCHE AKADEMIE DER WISSENSCHAFTEN
// Leibniz Hall
Markgrafenstraße 38 (Entrance: Gendarmenmarkt)
// 10117 Berlin

U Hausvogteiplatz (U2)
U Französische Straße (U6)

www.spp-climate-engineering.de