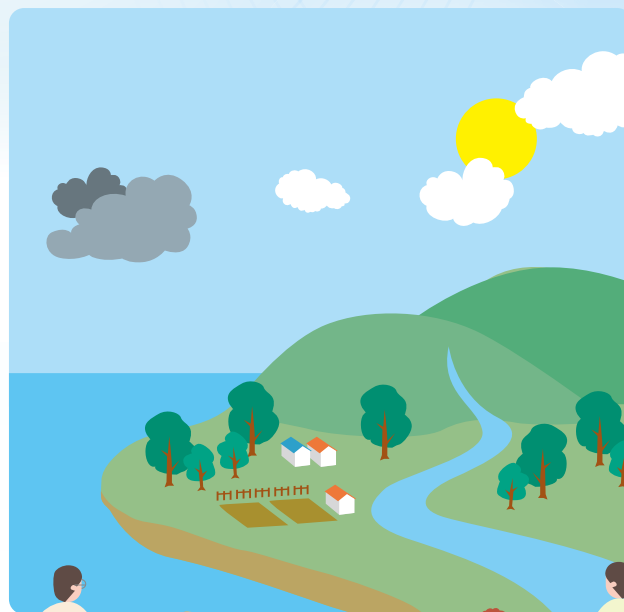


International Symposium on Weather Controllability 2024

気象の制御可能性



Oct.6 - Oct.7

1:00 p.m. - 6:00 p.m.

9:30 a.m. - 3:00 p.m.

Venue

Hitotsubashi Hall, Tokyo, Japan & Online

Language

English

Registration

<https://www.jst.go.jp/moonshot/sympo/20241006/index.html>



Can we reduce the loss and damage due to extreme weather with innovative ideas and technologies? This symposium will explore the potential of weather control to reduce disaster risk, which is becoming more severe due to climate change. To advance research and development of weather control technologies, researchers from diverse fields such as meteorology, weather engineering, mathematical sciences, and sociology will discuss the prospects of weather control based on their expertise.

Organizer: Japan Science and Technology Agency (JST)

Co-organizers: Cabinet Office (CAO)
Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Program

The Moonshot R&D Program, funded by the Japanese government, is pursuing innovations to tackle various societal issues. As part of the program, Moonshot Goal 8 (MS8) aims to realize a society safe from the threat of extreme winds and rains by controlling and modifying the weather by 2050. As Program Director of MS8, Dr. MIYOSHI Takemasa supervises projects, which consist of Core Research and Feasibility Study aimed at contributing to the achievement of this goal.

October 6

1:00 p.m.- Opening Remarks

JST, CAO

1:10 p.m.- MS8 Overview

MIYOSHI Takemasa (Team Leader, RIKEN)

1:30 p.m.- Keynote Speech 1

Seon Ki Park (Professor, Ewha Womans Univ., Korea)

2:30 p.m.- MS8 Core Research

Control Theory of Weather-Society Coupling Systems for Supporting Social Decision-Making

SAWADA Yohei (Associate Professor, The Univ. of Tokyo)

Typhoon Control Research Aiming for a Safe and Prosperous Society

FUDEYASU Hironori (Professor, Yokohama National Univ.)

Heavy Rainfall Control for Living Together with Isolated-Convective Rainstorms and Line-Shaped Rainbands

YAMAGUCHI Kosei (Associate Professor, Kyoto Univ.)

Artificial Generation of Upstream Maritime Heavy Rains to Govern Intense-Rain-Induced Disasters over Land

KOTSUKI Shunji (Professor, Chiba Univ.)

4:35 p.m.- ELSI (Ethical, Legal and Social Issues) for Weather Control

5:00 p.m.- Keynote Speech 2

Sarah Tessorndorf (Project Scientist, National Center for Atmospheric Research, USA)

October 7

9:30 a.m.- Special Talk

Thao Linh Tran (Research Fellow, Australian National Univ., Australia)

10:30 a.m.- MS8 Feasibility Study

Estimation and Control of Air-Sea Momentum and Heat Fluxes of Typhoons

TAKAGAKI Naohisa (Professor, Univ. of Hyogo)

Development of an Atmospheric Simulation Model for Estimating the Probability of Local Atmospheric Phenomena

NISHIZAWA Seiya (Senior Scientist, RIKEN)

Actuator Location Optimization for Large Degree-of-Freedom Fields

NONOMURA Taku (Professor, Nagoya Univ.)

Development of Unmanned Marine Observation Vehicles to Contribute to Forecasting and Monitoring of Typhoon Artificial Control

MORI Shuichi (Principal Researcher, Japan Agency for Marine-Earth Science and Technology)

12:30 p.m.- Panel Discussion on Science and Technology

1:45 p.m.- Panel Discussion on Social Responsibility

2:55 p.m.- Closing Remarks

MIYOSHI Takemasa (Team Leader, RIKEN)