



<b>Title</b>	About SOCREAL 2022 ; Committees ; The Program and Table of Contents
<b>Issue Date</b>	2022
<b>Doc URL</b>	<a href="http://hdl.handle.net/2115/84819">http://hdl.handle.net/2115/84819</a>
<b>Type</b>	other
<b>Note</b>	6th International Workshop On Philosophy and Logic of Social Reality. 28 February – 1 March, 2022, On-Line
<b>File Information</b>	Proceedings_of_SOCREAL2022_About.pdf



[Instructions for use](#)

Proceedings of  
SOCREAL2022

6th International Workshop  
on Philosophy and Logic  
of Social Reality

28 February – 1 March, 2022, On-Line

Keynote Lectures  
and Accepted Papers

Ed. by Tomoyuki Yamada  
Faculty of Humanities and Human Sciences  
Hokkaido University

## **About SOCREAL2022**

Since the last years of the 20th century, a number of attempts have been made in order to model various aspects of social interaction among agents including individual agents, organizations, and individuals representing organizations. The aim of SOCREAL Workshop is to bring together researchers working on diverse aspects of such interaction in logic, philosophy, ethics, computer science, cognitive science and related fields in order to share issues, ideas, techniques, and results.

The earlier editions of SOCREAL Workshop were held in March 2007, March 2010, October 2013, October 2016, and November 2022. Building upon the success of these editions, its 6th edition was held from 28 February till 1 March 2022 under the auspices of Philosophy and Ethics Laboratory at Faculty of Humanities and Human Sciences, Hokkaido University, CAEP (Center for Applied Ethics and Philosophy) at Faculty of Humanities and Human Sciences, Hokkaido University, and LOG-UCI (An interdisciplinary study of the logical dynamics of the interaction between utterances and social contexts), a research project funded by JSPS (JSPS KAKENHI Grant Number JP 17H02258).

## **About this booklet**

This booklet includes all the abstracts and two slides of the invited and contributed papers presented in SOCREAL 2022. Contributed papers are selected on the basis of the reviews of the submitted abstracts. We are grateful to the members of Program Committee for their excellent reviews.

## **Committees**

### **Program Committee**

Thomas Ågotnes (University of Bergen, Norway, and Southwest University, China)  
Alexandru Baltag (University of Amsterdam, The Netherlands)  
Johan van Benthem (Stanford University, USA and Tsinghua University, China)  
Jose Carmo (Universidade da Madeira, Portugal)  
Mamoru Kaneko (Tsukuba University, Japan)  
Fenrong Liu (Tsinghua University, China)  
Yasuo Nakayama (Osaka University, Japan)  
Manuel Rebuschi (Universit de Lorraine, France)  
Katsuhiko Sano (Hokkaido University, Japan)  
Jeremy Seligman (The University of Auckland, New Zealand)  
Sonja Smets (University of Amsterdam, The Netherlands)  
Satoshi Tojo (JAIST, Japan)  
Allard Tamminga (University of Greifswald, Germany)  
Tomoyuki Yamada (Hokkaido University, Japan)

## **Organizing Committee**

Nobuo Kurata (Hokkaido University, Japan)

Katsuhiko Sano (Hokkaido University, Japan)

Tomoyuki Yamada (Hokkaido University, Japan)

# The Program and the Table of Contents

Day 1: 28 February, 2022

## Session 1

15:50–15:55	Opening	
15:55–16:40	[Key Note Lecture] Ryo Hatano & Katsuhiko Sano, “Dynamic Logic of Relation Changers Meets Brouwer”	1
16:45–17:30	[Key Note Lecture] Tai-Wei Hu & Mamoru Kaneko, “Epistemic Infinite-Regress Logics: the Surface to Deeper Layers and Latent Infinity”	2
17:35–18:20	[Key Note Lecture] Satoshi Tojo, “Plurivalent Logic for Multi-Agent Systems”	3

## Session 2

18:25–18:50	Yasuo Nakayama, “Agents, Actions, and Social Reality”	4
18:55–19:20	Satoru Suzuki, “Measurement-Theoretic Remarks on Reducibility of Decision-Theoretic Values of Questions and Answers to Their Information Values”	10
19:20–20:10	Break	
20:10–20:55	[Key Note Lecture] Fenrong Liu, “A Simple Logic of the Hide and Seek Game”	25
21:00–21:45	[Key Note Lecture] Johan van Benthem, “Graph Games and Logic Design”	26

Day 2: 1 March, 2022

## Session 3

16:00–16:45	[Key Note Lecture] Jeremy Seligman, “Inference as Belief Change”	60
16:50–17:35	[Key Note Lecture] Tomoyuki Yamada, “Completeness of Common sense Term-Sequence-Deontic-Alethic Logic”	61
17:40–18:05	Masanobu Toyooka and Katsuhiko Sano, “Craig Interpolation for a Sequent Calculus for Combining Intuitionistic and Classical Propositional Logic”	62

## Session 4

18:10–18:35	Tomoaki Kawano, “Simple Model and the Deduction System for Dynamic Epistemic Quantum Logic”	67
18:40–19:05	Leonardo Pacheco and Kazuyuki Tanaka, “On the Degrees of Ignorance: via Epistemic Logic and $\mu$ -Calculus”	74
19:10–19:55	[Key Note Lecture] Sonja Smets, “The Creation and Change of Social Networks”	79
19:55–20:45	Break	
20:45–21:30	[Key Note Lecture] Alexandru Baltag, “Learning what Others Know”	80
21:30–21:35	Closing	