

Program

Day 1: Monday, October 5

13:00 - 13:10 Opening Remarks: **Shigeru Kitazawa**,
Director General of CiNet, NICT

(A slot includes 5 min. discussion at the end)

13:10 - 14:00 Slot 1: Kenji Doya
“Toward more natural artificial intelligence”

14:00 - 14:50 Slot 2: **Wilma Bainbridge**
“Artificial intelligence can predict our memories better than we can”

14:50 - 15:35 Coffee break + Poster presentations

15:35 - 16:25 Slot 3: Andrew Lampinen
“What can neuroscience and AI learn from each other?
Case studies on generalization, and rational analysis”

16:25 - 17:15 Slot 4: **John Duncan**
“Mental models and the structure of cognition”

17:15 - 18:00 Discussion panel 1 – AI & Neuroscience

18:00 - 20:00 Poster presentations + Dinner

20:00 End of Day 1

Program

Day 2: Tuesday, October 6

(A slot includes 5 min. discussion at the end)

9:30 - 10:20 Slot 5: **Ida Momennejad**

“The Compositional Geometry of Flexible Cognition”

10:20 - 11:10 Slot 6: **Takufumi Yanagisawa**

“Exploring Representational Spaces for Visual-Imagery Brain–Machine Interfaces”

11:10 - 12:00 Slot 7: **Katharina Dobs**

“Functional Specialization in Biological and Artificial Visual Systems”

12:00 - 14:00 Lunch + Poster presentations

14:00 - 14:50 Slot 8: **Llion Jones & Kai Arulkumaran**

“Bridging the gap between Neuro-science and Machine Learning”

14:50 - 15:40 Slot 9: **Katherine Storrs**

“Using the toolkit of psychology to evaluate visual understanding in artificial models”

15:40 - 16:30 Coffee break + Poster presentations

16:30 - 17:20 Slot 10: **Robert Mok**

“From neural codes to connectivity: how circuit organization shapes fast learning and generalization in the hippocampus”

17:20 – 18:10 Slot 11: **Tatsuya Haga**

“Representations and dynamics in the hippocampus: Bridging space with concepts, and replay with sampling”

18:10 - 18:55 Discussion panel 2 – AI, industry and academia – how to work together?

18:55 End of Day 2

Program

Day 3: Wednesday, October 7

(A slot includes 5 min. discussion at the end)

9:30 - 10:20 Slot 12: **Martin Schrimpf**

“NeuroAI to Understand and Treat the Brain”

10:20 - 11:10 Slot 13: **Taro Toyoizumi**

“Modeling how the brain learns to represent ambiguous environments: Abstraction and Probability”

11:10 - 12:00 Slot 14: **Lis Kanashiro Pereira & Takuto Kinoshita-Yamamoto**

“Do LLMs and Brains Find the Same Things Funny (*Omoroi*)? Comparing Humor Representations in AI Models and the Human Brain”

“Human-Like Attention Emerges without Gaze Supervision: Three DINO-ViT Attention Systems and Their Neural Counterparts”

12:00 - 14:00 Lunch + Poster presentations

14:00 - 14:50 Slot 15: **Kentaro Abe**

“Language models for decoding non-human languages”

14:50 - 15:40 Slot 16: **Benjamin Hayden**

“How can LLMs help us understand the brain”

15:40 - 16:25 Coffee break + Poster presentations

16:25 - 17:15 Slot 17: **Shinji Nishimoto**

“Functional Organization of Perceptual and Cognitive Representations in the Human Brain across Naturalistic Experiences”

17:15 - 18:00 Discussion panel 3 – How to make progress on understanding natural and artificial intelligence?

18:00 - 18:10 Closing Remarks: **Robert Mok**

Chair of the conference