

WEDNESDAY, JUNE 8TH

NOON-1 P.M.	REGISTRATION/CHECK IN SALOMON LOBBY
1-2:30 P.M.	BASIC TUTORIALS Track 1 SALOMON 101 Angela Langdon <i>Reinforcement learning in biological circuits: model-free value representations and beyond</i>
1-2:30 P.M.	BASIC TUTORIALS Track 2 SALOMON 001 Amy Zhang <i>Basics of computational reinforcement learning</i>
2:30-3 P.M.	COFFEE BREAK
3-4:30 P.M.	ADVANCED TUTORIAL 1 SALOMON 101 Xiaosi Gu <i>Modeling the social brain</i>
4:30-6 P.M.	ADVANCED TUTORIAL 2 SALOMON 101 Jacob Andreas <i>How to do things with words</i>
6-8 P.M.	OPENING RECEPTION OUTSIDE SAYLES HALL

THURSDAY, JUNE 9TH

7:30-8:30 A.M.	REGISTRATION/CHECK IN/BREAKFAST
8:30-10:30 A.M.	SESSION 1 SALOMON 101 Quentin Huys, Chair
8:30-9:10 A.M.	Nao Uchida <i>Time-derivative model of dopamine</i>
9:10-9:50 A.M.	Jill O'Reilly <i>Uncertainty and expectation in perceptual decisions</i>
9:50-10:10 A.M.	Jonathan Nicholas <i>Uncertainty alters the balance between incremental learning and episodic memory</i>
10:10-10:30 A.M.	Esra'a Saleh <i>Should models be accurate?</i>
10:30-11 A.M.	COFFEE BREAK
11-12:40 P.M.	SESSION 2 SALOMON 101 Peter Stone, Chair
11-11:40 A.M.	Frederike Petzschner <i>The role of reward and control in gambling addiction</i>
11:40 A.M.-NOON	Ili Ma and Camille Phaneuf <i>Distinct developmental trajectories in the cognitive components of complex planning</i>
NOON-12:40 P.M.	Jakob Foerster <i>Zero-shot coordination and off-belief learning</i>
12:40-2:20 P.M.	LUNCH BREAK ON YOUR OWN
2:20-4:20 P.M.	SESSION 3 SALOMON 101 Catherine Hartley, Chair
2:20-2:40 P.M.	Diksha Gupta <i>An explanatory link between history biases and lapses</i>
2:40-3:20 P.M.	Marcelo Mattar <i>The role of experience replay in biological planning and non-local learning</i>
3:20-4 P.M.	Jeanette Bohg <i>On the role of vision, touch, and sound for robustness and generalisability in robotic manipulation</i>
4-4:20 P.M.	Aleksandra Kalinowska <i>Communication emergence in a goal-oriented environment: towards situated communication in multi-step interactions</i>
4:20-4:30 P.M.	POSTER SPOTLIGHTS SALOMON 101 Andrew Westbrook, Chair
4:30-7:30 P.M.	POSTER SESSION 1 SAYLES AND KASPER
7:30-10 P.M.	DINNER ON YOUR OWN+OPTIONAL SOCIAL ACTIVITY <i>(Codenames game night: Humans vs AI)</i>

FRIDAY, JUNE 10TH

7:30-8:30 A.M.	BREAKFAST
8:30-10:30 A.M.	SESSION 4 SALOMON 101 Marc Bellemare, Chair
8:30-9:10 A.M.	Arif Hamid <i>Dopamine waves in mouse striatum for agency learning: spatiotemporal inference and credit signals</i>
9:10-9:30 A.M.	Yash Chandak <i>Universal off-policy evaluation</i>
9:30-9:50 A.M.	Ruben van den Bosch <i>Striatal dopamine dissociates methylphenidate effects on value-based versus surprise-based reversal learning</i>
9:50-10:30 A.M.	Satinder Singh Baveja <i>Discovery in reinforcement learning</i>
10:30-11 A.M.	COFFEE BREAK
11-12:40 P.M.	SESSION 5 SALOMON 101 Roshan Cools, Chair
11-11:40 A.M.	Stefanie Tellex <i>Towards complex language in partially observed environments</i>
11:40 A.M.-12:20 P.M.	Melissa Sharpe <i>The cognitive (lateral) hypothalamus</i>
12:20-12:40 P.M.	Eli Meiroom <i>Optimizing tensor network contraction using reinforcement learning</i>
12:40-2:20 P.M.	LUNCH BREAK ON YOUR OWN
2:20-4:20 P.M.	SESSION 6 SALOMON 101 Michael Littman, Chair
2:20-3 P.M.	Oriel FeldmanHall <i>Navigating our uncertain social worlds</i>
3-3:40 P.M.	Scott Niekum <i>The role of guarantees in value alignment</i>
3:40-4 P.M.	Anna Trella <i>Designing reinforcement learning algorithms for digital interventions: pre-implementation guidelines</i>
4-4:20 P.M.	Kaue M Costa <i>The role of the orbitofrontal cortex in creating cognitive maps</i>
4:20-4:30 P.M.	POSTER SPOTLIGHTS SALOMON 101 Andrew Westbrook, Chair
4:30-7:30 P.M.	POSTER SESSION 2 SAYLES AND KASPER
7:30-10 P.M.	BANQUET SKYLINE AT WATERPLACE <i>(WaterFire viewing)</i>



SATURDAY, JUNE 11TH

7:30-8:30	BREAKFAST
8:30-10:30	SESSION 7 SALOMON 101 Yael Niv, Chair
8:30-9:10 A.M.	Matthew Gombolay <i>Learning representations of human-robot team coordination problems</i>
9:10-9:50 A.M.	Martha White <i>Planning with models based on value functions</i>
9:50-10:10 A.M.	Henry Sowerby <i>Designing rewards for fast learning</i>
10:10-10:30 A.M.	Sandra Romero Pinto <i>Linking tonic dopamine and biased value predictions in a biologically inspired reinforcement learning model</i>
10:30-10:45	COFFEE BREAK
10:45-11:45 A.M.	SESSION 8 SALOMON 101 Peter Dayan, Chair
10:45-11:05 A.M.	David Abel <i>Expressing non-Markov reward to a Markov agent</i>
11:05-11:45 A.M.	Josh Tenenbaum <i>Towards a more cognitive reinforcement learning</i>
11:45-11:55 A.M.	CLOSING REMARKS + BEST PAPER AWARDS
NOON-12:55 P.M.	LUNCH BREAK BOXED LUNCHESES PROVIDED
1-5 P.M.	WORKSHOPS SALOMON 101 Tessereau et al; Maps in reinforcement learning: efficient representations of structure and time in decision-making MACMILLAN HALL ROOM 117 Abel et al.; RL as a model of agency SALOMON 001 Bedder et al; Repetitive negative thinking and simulation in natural and artificial cognition 85 WATERMAN STREET, RM 130 Rish et al; Social alignment in humans and machines FRIEDMAN 102 Fountas et al; Temporal representation in reinforcement learning (TRiRL) FRIEDMAN 108 Mathewson et al; Reinforcement learning with humans in (and around) the loop FRIEDMAN 208 Dean et al; Building accountable and transparent RL

Conference Organizers:

General chairs:

Catherine Hartley and Michael L. Littman

Program chairs:

Roshan Cools and Peter Stone

Local chairs:

Michael J. Frank and George Konidaris

Area chairs:

Quentin Huys and Marc Bellemare

Workshop chairs:

Michael Browning and Katja Hofmann

Tutorial chairs:

Marcelo Mattar and Chelsea Finn

Awards and Spotlights chair:

Andrew Westbrook

Executive committee:

Emma Brunskill, Peter Dayan, Yael Niv, Satinder Singh, Ross Otto and Rich Sutton

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BROWN UNIVERSITY**