Session Program

6–11 Jun 2021

Canadian Association of Physicists

Association canadienne des physiciens et physiciennes

2021 CAP Virtual Congress / Congrès virtuel de l'ACP 2021

TS-2 Quantum Machine Learning (DTP) / Apprentissage automatique quantique (DPT)

Underline Conference System

Monday 7 June

11:00

TS-2 Quantum Machine Learning (DTP) / Apprentissage automatique quantique (DPT)

Session | **Location:** Underline Conference System | **Conveners:** Achim Kempf, Aida Ahmadzadegan

11:00–11:30 **(I) Quantum Barren Plateaus and Generative Pre-Training**

Speaker
Maria Kieferova

11:30–12:00

(I) Interpreting artificial neural networks in the context of theoretical physics.

Speaker
Sebastian Wetzel

12:00–12:30

Quantum Earth Mover's Distance: A New Approach to Learning Quantum Data

Speaker
Dr Milad Marvian

12:30–13:30 **Break (Optional: Discussions)**

13:30–14:00 **(I) Large Scale QML Research in TensorFlow Quantum**

Speaker
Michael Broughton

14:00–14:30 **(I) Training quantum computers the same way as neural networks**

Speaker
Nathan Killoran

14:30–14:45 **Break (Optional: Discussions)**

14:45–15:15

(I) Quantum enhanced sampling: an essential tool for today’s quantum computing practitioner

Speaker
Peter Johnson

15:15–15:45 **(I) Variational Neural Annealing**

Speaker
Juan Felipe Carrasquilla

15:45–16:00 **Break (Optional: Discussions)**

16:00–16:30 **(I) Classical and quantum control and learning**

Speaker
Barry Sanders

16:30–17:00

(I) Enhancing Machine Learning and Combinatorial Optimization with Quantum Generative Models

Speaker
Alejandro Perdomo-Ortiz

17:00–17:30 **Optional: Discussions**

17:30