



Canadian Association
of Physicists

Association canadienne
des physiciens et physiciennes

Contribution ID: 686

Type: **Invited Speaker / Conférencier(ère) invité(e)**

(I) Large Scale QML Research in TensorFlow Quantum

Tuesday 8 June 2021 13:30 (30 minutes)

In this presentation you'll see how to use TensorFlow Quantum to conduct large scale research in QML. The presentation will be broken down into two major sections: First you will follow along as we implement and scale up (beyond the authors original size) some existing QML works from the literature in TensorFlow Quantum. We will focus on how to write effective TensorFlow Quantum code, visualization tools and surrounding software that the TensorFlow ecosystem has curated that can be leveraged for QML. In the second half of the presentation we will review our recent work titled "Power of data in quantum machine learning" (<https://arxiv.org/abs/2011.01938>) and why we think developing an understanding of data is an important step to achieving quantum advantage in QML.

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

Track Classification: Symposia Day (DTP) - Quantum Machine Learning