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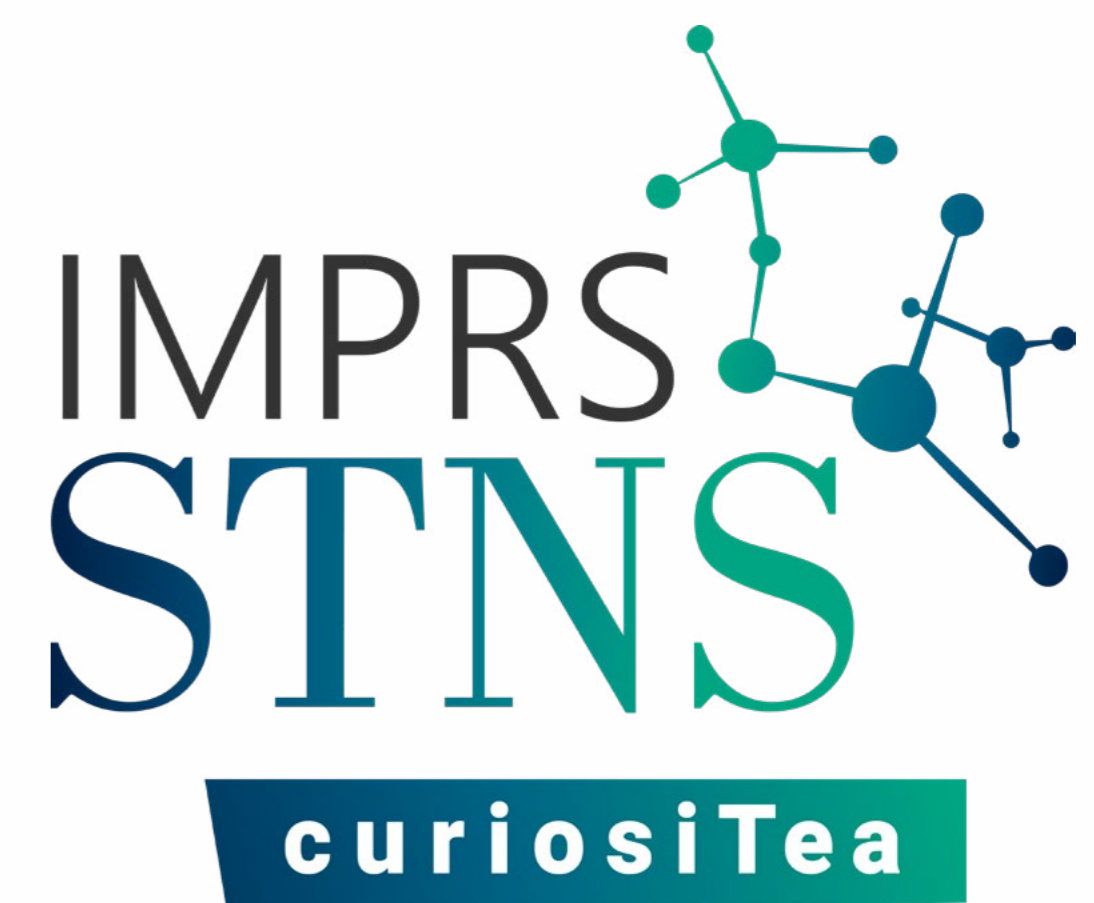curiosiTea

PHOTONIC IMPLEMENTATIONS OF NEUROMORPHIC DEVICES AND SYSTEMS

ABSTRACT

In this presentation we will give an overview of recent research towards integrated photonic neuromorphic computing. We will discuss the design and operating principles of the „Mach-Zehnder Interferometer (MZI) Mesh Circuit"- a particular integrated photonic system used to accelerate matrix vector multiplication, which is significant to neural networks. We will also discuss emerging materials and devices for multi-level nonvolatile optical memory, which could be used as synaptic weights in neuromorphic architectures.

JULY 21, 2021
4:00 PM
ONLINE