Design and testing of a Silicon Photonic Tensor Core with integrated lasers

1st Xiaoxuan Ma
The Department of Electrical and
Computer Engineering
The George Washington
University
Washington, DC, USA
xxma94@gwu.edu

2nd Nicola Peserico
The Department of Electrical and
Computer Engineering
The George Washington
University
Washington, DC, USA
npeserico@email.gwu.edu

3rd Bhavin J. Shastri
Department of Physics,
Engineering Physics and
Astronomy
Queen's University
Kingston, Country
shastri@ieee.org

4th Volker J. Sorger
The Department of Electrical and
Computer Engineering
The George Washington
University
Washington, DC, USA
sorger@gwu.edu

Abstract Here we present a reliable architecture to perform Matrix-Vector Multiplication exploiting the integration capability of Silicon Photonics, pro 1731727 (TasphsM

nt to the micro-ring modulator ed light signals with different ous waveguide and detected by