## **TWEPP 2018 Topical Workshop on Electronics for Particle Physics**



Contribution ID: 196 Type: Oral

## Silicon photonics for next-generation optical interconnects

Tuesday, 18 September 2018 15:40 (45 minutes)

Demand for data communication in cloud data-centres is projected to continue to grow exponentially in the next few years.

In this presentation, we will discuss the opportunity and challenges related to silicon photonics technology as a short-reach optical interconnect platform. First, we will discuss the scaling trends and industry platform. Next, we will take a deep dive into the silicon photonics roadmap, covering both passive and high-speed active optical devices. We will describe how these building blocks can be combined to implement low-power Terabit-scale optical transceivers. Finally, we will present other opportunities for silicon photonics outside datacom.

## **Summary**

**Presenter:** LARDENOIS, Sebastien (IMEC)

Session Classification: Invited