

COURSE PROGRAM

Day 1: Monday, 21 March 2022

12:30 PM – 1:15 PM

Light Lunch

Welcome, practical details and introduction of the experts , about LIGENTEC

1:15 PM – 1:30 PM

Roel Baets

Chair of ePIXfab, Prof. at Ghent University-imec, Belgium

Tutorial: Introduction to Silicon Nitride PICs

1:30 PM – 2:15 PM

Roel Baets

Chair of ePIXfab, Prof. at Ghent University – imec, Belgium

Topical Lecture: Different silicon nitride flavors (LPCVD, PECVD, other)

2:15 PM – 2:45 PM

Andim Stassen

imec, Belgium

Topical Lecture: Different waveguide types and associated fiber-chip coupling methods

2:45 PM – 3:15 PM

Douwe Geuzebroek

LioniX International, the Netherlands

3:15 PM – 3:45 PM

COFFEE BREAK

Topical Lecture: Ultra-low loss in SiN waveguides

3:45 PM – 4:15 PM

Michael Geiselmann

LIGENTEC, Switzerland

Topical Lecture: Challenges and opportunities of large-scale integration in SiN Integrated Photonics

4:15 PM – 4:45 PM

Pascual Muñoz

Universitat Politècnica de València, Spain

Topical Lecture: Integration of modulators – the options

4:45 PM – 5:15 PM

Amir Hossein Ghadimi

CSEM, Switzerland

5:15 PM – 6:00 PM

Apéritif

Day 2: Tuesday, 22 March 2022

Tutorial: Overview of the current state-of-the-art

08:45 AM – 09:30 AM

Jeremy Witzens

RWTH Aachen, Germany

Topical Lecture: Integration of light sources – the options

09:30 AM – 10:00 AM

Camiel Op de Beeck

LIGENTEC, Switzerland

Topical Lecture: Silicon Nitride Integrated Photonics Fabrication Platforms

10:00 AM – 10:30 AM

Abdul Rahim

ePIXfab – Ghent University (Belgium)

10:30 AM – 11:00 AM

COFFEE BREAK

Use Case: Nonlinear optical functions enabled by SiN PICs

11:00 AM – 11:30 AM

Camille Sophie Brès

EPFL, Switzerland

Use Case: Quantum signal Processes enabled by SiN Integrated Photonics

11:30 AM – 12:00 PM

Ségolène Olivier

CEA – LETI, France

Use Case: Microwave Photonics and Optical Communication

12:00 PM – 12:30 PM

David Marpaung

University of Twente, the Netherlands

Use Case: Ultra-sensitive Diagnostic Platform by using SiN PICs

12:30 PM – 13:00 PM

Luc Scheres

Surfix, the Netherlands

13:00 PM – 13:05 PM

Closing remarks at the end of the course

13:05 PM – 2:00 PM

STANDING LUNCH

2:00 PM – 2:30 PM

LIGENTEC Technology and PIC Fabrication Platform