



Birck Nanotechnology Center Seminar Series

Risk Taking, Innovation & Failures with Silicon Photonics: A Journey from Research to Product in Silicon Valley



Dr. Mario Paniccia

Thursday April 7th, 2022

12:00pm – 1:00pm

In Person : BRK 2001

Virtual: <https://purdue-edu.zoom.us/j/94943900379>

Abstract:

The talk will give insights and learnings on the 20 year journey of taking Silicon Photonics from a crazy idea that no one thought would ever work to today being one of the key technologies used to transmit optical data in every data center around the world. Dr Paniccia will talk about the successes and failures along the way to make this technology a reality and give his insights to the next generation of future scientists, innovators and engineers as they go into the high tech industry.

Bio:

Dr. Paniccia is a seasoned technical and business executive based in Silicon Valley, CA. In November 2019, Paniccia was appointed CEO and Chairman of Anello Photonics, a VC backed Silicon Photonics startup which he co-founded. Prior to Anello Photonics, Paniccia spent 22 years at Intel Corporation where he achieved the status of Intel Fellow, Chief Technology Officer and GM for the Silicon Photonics Solutions Group. During his tenure at Intel he served in various roles from R&D, to strategic direction setting, to driving the development and commercialization of technologies, and finally running a business unit. Paniccia started Intel's Silicon Photonics program from its inception and drove the technology to product commercialization. This silicon photonics technology is deployed today in many of the major cloud and data centers around the world. Paniccia is considered one of the industry pioneers and a world expert in the field silicon photonics.

Paniccia earned a bachelor's degree in physics in 1988 from the State University of New York at Binghamton and a Ph.D. in solid state physics from Purdue University in 1994. In October 2008 he was named by R&D magazine as "Scientist of the Year". In May 2009 Paniccia was awarded an Honorary Doctorate Degree from Binghamton University. In 2014 Paniccia completed an accelerated Executive leadership program at Stanford University School of Business. Paniccia has over 80 patents issued or pending. He is a Fellow of the IEEE, SPIE and OSA. In February 2021 Paniccia was inducted into the National Academy of Engineers (NAE) for his "contributions and commercialization to the field of silicon photonics".