ICFO

SEMINAR: Component development for a TFLN PDK: from simulation to circuit model

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12:00 to 13:00
Seminar Room

Thin-film lithium niobate (TFLN) combines fast, low-loss electro-optic modulation with strong second-order nonlinearity, but turning individual device demonstrations into reliable circuits requires a process design kit (PDK). This talk introduces the elements of a PDK and follows one component through the full development cycle: a directional coupler is simulated, implemented as a reusable parametric cell in GDSFactory, and connected to a circuit model to demonstrate a ring resonator in INTERCONNECT. The talk closes with how simulation and measurement differ, how those differences feed back into the design, and how technology readiness levels describe the maturity of a platform.

Hosted by: Prof. Dr. Valerio Pruneri