

# **The food chain for photonics integration**

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As digital applications, services, communications are dramatically increasing with super-linear growth rate the need of bandwidth is increasing as well and the exploitation of photonics is becoming always more pervasive.

The lecture will illustrate the present and perspective situation starting from the vision of the applications, in general, and the communication infrastructure for ubiquitous connections. Given the present situation and the perspectives, an analysis of the requirements enabling scaling will be presented.

Technologies enabling scalable bandwidth will be indicated and discussed in general with a focus on the key/critical building blocks that still require improvements..