

## Scalable quantum computing platforms (25'+5')

*Thursday 29 June 2023 09:40 (30 minutes)*



Figure 1: Speaker –Stefan Filipp

### **Abstract**

Quantum computers have the potential to solve complex problems efficiently. However, to unleash their full capability, complex quantum systems have to be manufactured, manipulated and measured with unprecedented accuracy and precision. Despite the demanding requirements both at the hardware and the software level, enormous progress has been made in scaling up quantum processors, leading to impressive demonstrations of their future power already today. This presentation provides an overview of leading approaches in

scalable quantum computing, highlighting the current status as well as advantages and potential challenges associated with platforms based on atoms and on solid-state systems. Particular attention will be paid to recent developments in the Munich Quantum Valley ecosystem.

**Presenter:** Prof. FILIPP, Stefan (WMI)

**Session Classification:** Quantum Hardware