



Venerdì 4 Luglio 2025 alle ore 15:00 presso l'aula F

il **Dott. Marco Di Giovannantonio**

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terrà il seminario dal titolo:

## **On-surface synthesis of atomically precise carbon-based nanomaterials**

The fabrication of extended low-dimensional molecular nanostructures presents both a significant scientific challenge and a promising technological opportunity. On-surface synthesis (OSS) has emerged as a powerful method for constructing covalently bonded molecular architectures that were previously inaccessible. The use of clean, well-controlled environments has further enabled the application of advanced surface science techniques to investigate these systems with high precision.

In this seminar, I will provide an overview of the OSS approach, highlighting key strategies for tailoring organic nanostructures through the incorporation of functional groups such as methyl, vinyl, and isopropyl. I will also present recent work from the ONSET Lab focused on the development of organic platforms for the coordination of single metal atoms via OSS. Specifically, we demonstrate the successful formation of single-atom platforms (SAPs), where individual metal atoms are precisely coordinated to organic templates forming well-defined active centers with broad potential for catalysis and other applications.

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*La presenza della S. V. sarà molto gradita*