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	(Lasi	t updat	te: Ma	ay 26 <sup>t</sup>	<sup>h</sup> , 20	020)	

## Description

Since the discovery of graphene and the subsequent Nobel Prize for its fascinating two-dimensional (2D) properties, a wide variety of atomically thin materials has been discovered, which together cover almost every phenomenon in condensed matter physics such as magnetism, superconductivity, optoelectronics, spintronics, topological insulation and many more.

Two-dimensional (2D) crystals can be extracted from a variety of bulk layered materials, and assembled on top of each other into van der Waals hetero-structures. By choosing a precise sequence of assembly one can engineer complex materials with strong electronic interactions and enhanced quantum effects. The purpose of this session is to present the latest advances in this field of condensed matter physics in full effervescence.

## **Keywords**

atomically thin materials; Van der Waals Heterostructures; elaboration, characterization & properties

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