



Contribution ID: 127

Type: **Poster**

【532】 Probing mono- and few-layer $1T-TaSe_2$ with ARPES

Tuesday 10 September 2024 19:47 (1 minute)

Physical properties can change significantly when bulk materials are thinned down to a few atomic layers. Here, we study the intriguing example of the metallic charge density wave system $1T-TaSe_2$. Previous transport experiments on $1T-TaSe_2$ found a metal to insulator transition at a thickness of 5 layers. Monolayer $1T-TaSe_2$ was proposed to be a Mott insulator and is a candidate quantum spin liquid. We perform Angle resolved photoelectron spectroscopy (ARPES) measurements on ultra clean exfoliated few layer $1T-TaSe_2$ to study this intriguing phase of matter.

Author: MANDLOI, Salony (University of Geneva)

Co-authors: TAMAI, Anna (University of Geneva); BAUMBERGER, Felix (Department of Quantum Matter Physics, University of Geneva, 24 Quai Ernest-Ansermet, CH-1211, Geneva, Switzerland ; Swiss Light Source, Paul Scherrer Institut, CH-5232 Villigen PSI, Switzerland)

Presenter: MANDLOI, Salony (University of Geneva)

Session Classification: Poster Session

Track Classification: Electron and photon spectroscopies of quantum materials