



Contribution ID: 101

Type: Talk

【614】 A comparative photoemission spectroscopy and scanning tunneling microscopy study of the topological material ZrTe₅

Tuesday 27 August 2019 17:45 (15 minutes)

The low-energy electronic structure and topological nature of ZrTe₅ has recently been under debate with several contradictory results published. It consists of nearly linearly dispersing bands at the Gamma point with potentially a small band gap, making ZrTe₅ very sensitive to structural defects. However, only minor attention has been given to the influence of the sample growth method on the crystal quality and its physical properties.

Here we present angle-resolved photoemission spectroscopy and scanning tunneling microscopy measurements performed on samples grown by the two different methods used for ZrTe₅ growth. We will focus on the presence of defects and discuss their influence on the low-energy electronic structure of ZrTe₅.

Authors: SALZMANN, Björn (Universität Fribourg); RUMO, Maxime (University Fribourg); Dr NICHOLSON, Christopher William (Université de Fribourg); Dr JAOUEN, Thomas (Université de Fribourg); VANINI, Fabiano (Universität Freiburg); Prof. AKRAP, Ana (University of Fribourg); Prof. AEBI, Phillipp (Université de Fribourg); Prof. MONNEY, Claude (Université de Fribourg)

Presenter: SALZMANN, Björn (Universität Fribourg)

Session Classification: MaNEP: Correlations and topology in quantum matter

Track Classification: MaNEP Session: Correlations and topology in quantum matter