

Théorie conforme des champs et systèmes quantiques à plusieurs corps  
21 août – 9 septembre 2022

Conformal field theory and quantum many-body physics  
August 21 – September 9, 2022

**Fakher Assaad**  
(University of Würzburg)

### **Spin chains on metallic surfaces**

---

Heavy fermion systems show a plethora of phases and quantum phase transitions that continue to fascinate. In this talk, we will argue that spin-chains on metallic surfaces provide an experimentally relevant, and numerically tractable model system in which phases and quantum phase transitions of heavy fermions can be studied. This includes Kondo breakdown transitions as well as magnetic order disorder transitions in metallic environments. If time allows, we will also touch on recent results pertaining to exotic quantum criticality in Dirac systems.