

# Seminar on Condensed Matter Theory

Group of Theoretical Physics at the Department of Condensed Matter Physics  
of Charles University has a pleasure to invite you to attend the seminar

**on 23 May 2019 at 13:00**

at Faculty of Mathematics and Physics of Charles University, Ke Karlovu 5, 121 16 Praha 2

**Seminar room F052**



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## 1D molecular systems on surfaces

Low dimensional materials offer very interesting material and physical properties due to reduced dimensionality. At present, 2D materials are the focus of attention. However, 1D systems often show far more exotic behaviour, such as Luttinger liquid, Peierls distortion, Majorana states etc.. We will present different classes of 1D molecular chains formed on metallic surfaces, which physical properties were investigated by scanning probe microscopy supported by theoretical simulations. We will discuss a presence of non-trivial topological end states rationalized by Su-Schrieffer-Heeger model. We will also demonstrate interesting mechanical and electronic properties of organometalic chains resulting from on surface polymerization of ferrocene molecules.

