

## Pozvánka na seminár

## Ústavu experimentálnej fyziky SAV, v. v. i.



štvrtok, 19. mája 2022 o 11:00

budova PROMATECH m. č. 108, Watsonova 47A, Košice (on-line: https://uefsav.webex.com/meet/gabani)

## "Perspectives of proximity effects in layered van der Waals hetereostructures"

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## Anotácia:

Layered van der Waals heterostructures provide unprecedented systems for discovering novel physical effects and engineering their properties utilizing proximity effects. Proximity effects benefit on vulnerability of the two-dimensional confinement of electronic states within layers. Up to now there have been discovered stable two-dimensional metallic, semimetallic, semiconducting, insulating, superconducting and magnetic materials. In the talk, perspectives of the two-dimensional materials and their combination in van der Waals vertical stacks from theoretical and experimental point of view will be discussed. We will focus on prototypical spin-orbit coupling and magnetic proximity induced effects in graphene and other two-dimensional materials relevant from technological point of view for current induced magnetization switching.

The work is supported by the grants 2DSOTECH JTC 2021 ERA-NET and IMPULZ IM-2021-42.

V Košiciach dňa 12. 5. 2022

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