

# СОФИЙСКИ УНИВЕРСИТЕТ ФИЗИЧЕСКИ ФАКУЛТЕТ

### ФАКУЛТЕТЕН СЕМИНАР

понеделник, 14.05.2018 г., 16:15 ч., зала А415

#### Julie Nováková

Charles University in Prague, CUNI, Faculty of Science

## The Search for Life in The Solar System

So far, Earth remains the only object known to us to host life, but other solar system bodies seem to have had conditions favorable for life as we know it in the past, or still posses them. These are the targets for astrobiological research in situ. Mars had liquid water in the past and could have isolated patches such as subsurface vents or subglacial lake systems up to this day, though liquid water on the surface would be unstable due to the low atmospheric pressure. Icy moons such as Europa or Enceladus harbor oceans under their icy crusts. Titan represents an interesting site for studying the potential for life in a different solvent (methane, in this case). Finally, though the conditions on the surface on Venus are far from conductive for life nowadays, it may have had liquid water oceans for a substantial part of its past. We'll have a look at how and where to look for biosignatures in the solar system.



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