

# 121<sup>st</sup> WPI-IIIS Seminar

## What do we learn from studying 'local sleep'?

Contrary to the widely-held notion, waking and sleep are not global, mutually exclusive states. During NREM sleep, most EEG or LFP slow waves occur exclusively within local cortical areas. Interestingly, even during waking, local cortical slow waves are surprisingly common, and not only after sleep deprivation, but also during active behaviour. Notably, the occurrence of local sleep during wake may affect waking performance. Another major type of sleep oscillations - sleep spindles – also occurs in most cases within local cortical networks. Thus, existing evidence suggests that local dynamics of cortical activity is a fundamental property of sleep, which provides important new insights in understanding sleep regulation and function.



**Dr. Vladyslav Vyazovskiy**

University of Oxford

Date: **Friday, December 15, 2017**

Time: **11:30 – 12:00**

Venue: **1F Auditorium, IIIS Building**



Contact: International Institute for Integrative Sleep Medicine, University of Tsukuba  
029-853-8080 (ext. 8080) | [wpi-iiis-alliance@ml.cc.tsukuba.ac.jp](mailto:wpi-iiis-alliance@ml.cc.tsukuba.ac.jp)