

**Seminarium Astrofizyczne**  
wtorek 26.11.2024 godz. 12:30  
ul. Pasteura 7, sala 404

transmisja on line  
<https://www.gotomeet.me/NCBJmeetings/seminarium-astrofizyczne>  
Password: AstroSemi

**Prof. David Valls-Gabaud**  
Observatoire de Paris, LERMA

## **The realm of the ultra-low surface brightness universe**

**Abstract :** The current astronomical instrumentation has been optimised towards the detection of faint unresolved sources, such as stars in the halo and in the Local Group, or distant galaxies. This has led to a systematic bias against the detection of large, diffuse objects with surface brightness levels much smaller than the brightness of the night sky. A number of pioneering instruments, as well as amateur astronomers, is completely changing this landscape with discoveries ranging from the zodiacal light to the cosmological background radiation in the optical, through shells around stars, galactic streams and ultra-diffuse galaxies, among many other topics which are being revisited. For example, whilst known for a long time, the implied incompleteness of the current galaxy catalogues is a serious issue for cosmological studies with implications on galaxy formation and the nature of dark matter.

Serdecznie zapraszam,  
Kishan Deka, on behalf of the SOC