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## **OBAVIJEST**

Dana **23.10.2019.** u **13:15 sati** održat će se na Geofizičkom odsjeku PMF-a sljedeće izlaganje:

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### **Nocturnal low-level stratus clouds over southern West Africa: Insights from the DACCIWA field campaign**

**SAŽETAK:** During the summer monsoon season in southern West Africa, low-level stratus clouds (LLC) form frequently in the atmospheric boundary layer (ABL) during the night. These clouds have a distinct diurnal cycle, as they often persist long into the following day and consequently transition into convective clouds. Considering the effect these clouds have on the surface energy and radiation budgets as well as on the diurnal cycle of the ABL, they are undoubtedly important for the regional climate. However, an adequate representation of LLC in the state-of-the-art weather and climate models is still a challenge, which is largely due to the lack of high-quality observations in this region and gaps in understanding of underlying processes. Up to now, investigations of LLC in this region have been performed based on satellite images, synoptic observations and few modeling studies, however, little is known about the processes controlling their evolution, maintenance and dissolution.

In order to fulfill the existing gap, a comprehensive field campaign within the Dynamics-aerosol-chemistry-cloud-interactions over West Africa (DACCIWA) project was conducted during 2016 monsoon season at three supersites in Ghana, Benin and Nigeria. The comprehensive and unique data set, which consists of remote sensing and in situ data, enables, for the first time, the investigation of cloud characteristics, dynamic and thermodynamic conditions at high temporal and vertical resolutions. In this presentation I will present findings regarding LLC characteristics, the intra-night variability of ABL conditions and physical processes relevant for formation, maintenance and dissolution of LLC, as well as to assess their relative importance using measurements from the DACCIWA campaign.

Pozivaju se studenti i svi zainteresirani da prisustvuju predavanju, koje će se održati u **predavaoni P2** Geofizičkog odsjeka PMF-a, Horvatovac 95, Zagreb.