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## **OBAVIJEST**

Dana **21.06.2018.** u **14:00 sati** održat će se na Geofizičkom odsjeku PMF-a  
sljedeće izlaganje (seminar na doktorskom studiju):

**Branimir Omazić**

(PMF, Zagreb)

### **Testing evapotranspiration equations using lysimeter observations in a semiarid climate**

**SAŽETAK:** Seven methods for calculating average daily  $ET_0$  were evaluated in semiarid climate from 2000 to 2002. For evaluation a continuous weighing lysimeter was used with a precision of 250 g. Lysimeters are standard instruments used in hydrology and water-quality research. In particular, they are used to measure percolation beneath the vegetation root zone and water use through evaporative processes from vegetation. With the weighing lysimeter, an intact soil column is excavated with a specialized auger. This column is encased in a concrete enclosure and placed back into the ground. Beneath the column is a weighing balance which, depending on the model, can measure the several tonne soil column to milligram precision. Beneath the balance is a bunker where data loggers, samplers, siphons, electronics, etc. are located.

An automated agrometeorological weather station was also used that provided 10-min, hourly and daily recordings of the climatic data necessary for calculating  $ET_0$ . Methods were compared by using simple regression analysis and elementary statistics. Equations were also evaluated by differentiating two seasons of the year, one of high evaporative demand, between April and September, and the other of low demand between October and March. One of the methods, Hargreaves method, gave good results and only measuring quantities required are mean, maximum and minimum temperature. Because of that Hargreaves method is often used. However, this method needs local calibration. Local calibration of the related equation for humid area (8 locations in Croatia, Bosnia and Herzegovina and Serbia) and semiarid area is also shown in this presentation.

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