

## On $R^2$ in linear mixed models

---

JULIA VOLAUFOVA

*Biostatistics Program  
LSUHSC School of Public Health (USA)*

jvolau@lsuhsc.edu

The statistic  $R^2$  in fixed-effects regression settings is mostly understood as a measure of the proportion of variability explained by the model. Here we look into several definitions of generalizations of  $R^2$  defined for linear mixed effects models published during recent decades. We try to address questions such as “Do these measures coincide in specific models?” “What do they measure?”, etc.

This is joint work with O. BLAHA (LSUHSC School of Public Health) and L. R. LAMOTTE (LSUHSC School of Public Health).