## 1138-20-34 Sang-hyun Kim and Thomas Koberda\* (thomas.koberda@gmail.com). Diffeomorphism groups of critical regularity.

I will describe a construction of finitely generated groups acting on the circle and on the interval of prescribed regularity  $\alpha \in [1, \infty)$  and which admit no smoothing to higher regularity. I will give some applications to continuous groups of diffeomorphisms and to foliation theory. (Received January 18, 2018)