1167-18-69 **Matthew B. Young*** (matthew.young@usu.edu), Department of Mathematics and Statistics, Utah State University, Logan, UT 84322. *Orientation twisted transgression in representation theory and physics.*

Transgression is a topological procedure which constructs cohomology classes on a mapping space from cohomology classes on the target. I will describe a version of transgression which involves integration along fibres which are unoriented and explain its natural appearance in representation theory, topological field theory and string/M-theory. Partially based on joint work with Behrang Noohi. (Received February 15, 2021)