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Jer-Chin Chuang* (chuang@math.duke.edu), Duke University, Department of Mathematics,
Box 90320, Durham, NC 27708-0320. *Subdivisions and Transgressive Chains.*

Combinatorial transgressions are secondary invariants of a space admitting triangulations. They arise from subdivisions and are analogous to transgressive forms such as those arising in Chern-Weil theory. Unlike combinatorial characteristic classes, combinatorial transgressions have not been previously studied. In this talk, we discuss a characterization of transgressions that are path-independent of subdivision sequence. The result is obtained by using a cohomology on posets that is shown to be equivalent to higher derived functors of the inverse (or projective) limit over the opposite poset. (Received August 07, 2008)