Dorina Mitrea* (mitread@missouri.edu), University of Missouri, Department of Mathematics, Columbia, MO 65211. A general jump-formula in the class of tempered distributions. Preliminary report.

Since the pioneering work of Sokhotsky and Plemelj, jump formulas for singular integral operators have been of basic importance in the treatment of boundary value problems via boundary layer methods. In my talk, I will discuss a result, formulated in the language of tempered distributions, which isolates the active ingredient in any such jump formula. Several applications to problems in PDEs in harmonic analysis will be presented as well. (Received August 13, 2013)