1019-49-144 Marian Bocea* (marian.bocea@ndsu.edu), Department of Mathematics, 300 Minard Hall, North Dakota State University, Fargo, ND 58105. Variational principles in L^{∞} under general PDE constraints.

New variational principles for a general class of supremal functionals arising by means of Γ -convergence are presented. Applications to dielectric breakdown and polycrystal plasticity will be discussed. (Received August 13, 2006)