1147-35-150 Connor Mooney* (mooneycr@math.uci.edu). A proof of the Krylov-Safonov theorem without localization.

The C^{α} estimate of Krylov-Safonov and the $W^{2,\epsilon}$ estimate of Lin for linear elliptic equations with rough coefficients play an important role in the regularity theory for fully nonlinear PDE. We will discuss a proof of these results that avoids a technical step from the classical approach and gives improved (and in some cases optimal) dependence of the exponents on the ellipticity constants. (Received January 03, 2019)