Humberto A. Diaz* (humbertd@ucr.edu). SOME NILPOTENCE THEOREMS FOR CHOW MOTIVES.

Using fundamental results of Deligne, we prove (under a suitable hypothesis) a nilpotence theorem for Chow motives with rational coefficients and give some applications of it (e.g., show how it may be used to prove the Chow-Künneh conjecture for certain varieties). We also prove a torsion nilpotence result for surfaces, using the same strategy. (Received August 22, 2017)