1043-13-122 Eric Edo (edo@univ-nc.nc), Arno van den Essen* (essen@math.ru.nl) and Stefan Maubach (s.maubach@science.ru.nl). A note on k[z]-automorphisms in two variables. Preliminary report.

A method is discussed to construct k[z]-coordinates of k[x, y, z] by starting with automorphisms in one variable over a coefficient ring with nilpotent elements. It is shown that the non-tame automorphisms of k[x, y, z] correspond with the non-tame automorphisms in one variable. In particular it follows that the Nagata-automorphism corresponds with the simplest non-tame automorphism in one variable. (Received August 23, 2008)