1027-14-132   **Morgan P. Sherman*** (`morgan.sherman@csuci.edu`), 24 University Dr., 286 Sage Hall, California State University, Channel Islands, Camarillo, CA 93012. *The infinitely near Borel-fixed points on the Hilbert scheme.*

Given an ideal I and a weight vector w which partially orders monomials we can consider the initial ideal $\mathrm{in}_w(I)$ which has the same Hilbert function. A well known construction carries this out via a one-parameter subgroup of a GL_{n+1} which can then be viewed as a curve on the corresponding Hilbert scheme. In 1979 Andre Galligo proved that if I is in generic coordinates, and if w induces a monomial order up to a large enough degree, then $\mathrm{in}_w(I)$ is fixed by the action of a Borel subgroup in GL_{n+1}. We prove that the direction the path approaches the Borel-fixed point on the Hilbert scheme is also Borel-fixed. (Received February 23, 2007)