1135-13-743 **Thomas Polstra** and **Ilya Smirnov*** (ismirnov@umich.edu), Department of Mathematics, University of Michigan, 2074 East Hall, 530 Church Street, Ann Arbor, MI 48109. *Hilbert-Kunz multiplicity, F-signature, and finite determinacy of singularities.*

Given a singularity defined by power series in $F[[x_1, \ldots, x_n]]$, we may ask whether it is possible to truncate the defining equations so that the resulting singularity in $F[x_1, \ldots, x_n]$ will be equivalent to the original one.

We approach this problem in positive characteristic, where we may use Hilbert-Kunz multiplicity and F-signature to compare singularities. Provided that the original singularity was a complete intersection, we prove that the singularity of a truncation can be made arbitrarily close to the original if we leave sufficiently many terms. (Received September 13, 2017)