1163-13-1568   **Olga Kashcheyeva*** (`kolga@uic.edu`), 851 S Morgan Street, M/C 249, Chicago, IL 60607.
Generating sequences vs key polynomials of valuations centered in 3-dimensional polynomial rings. Preliminary report.

Let k be a field and $K = k(x, y)$. Let ν be a valuation centered on $k[x, y, z]_{(x,y,z)}$ such that the rank of ν is 1 and the residue field if ν is k. We provide a construction of a generating sequence for ν in $k[x, y, z]$ independent of the rational rank of ν. We then use it to illustrate the difference between generating sequences of valuation ν in $k[x, y, z]$ and complete sequences of key polynomials of ν in $K[z]$. (Received September 15, 2020)