1145-47-1673 **Brian C Lins*** (blins@hsc.edu), Midlothian, VA 23112-1535, and **Ilya M. Spitkovsky** (imspitkovsky@gmail.com). *Inverse continuity of the numerical range map for Hilbert space operators.*

We describe continuity properties of the multivalued inverse of the numerical range map $f_A : x \mapsto \langle Ax, x\rangle$ associated with a linear operator A defined on a complex Hilbert space $\mathcal{H}$. We prove in particular that f_A^{-1} is strongly continuous at all points of the interior of the numerical range $W(A)$. We give examples where strong and weak continuity fail on the boundary and address special cases such as normal and compact operators. (Received September 23, 2018)