

**CORRECTION TO SECTION 5 OF
[https://u.osu.edu/friedman.8/
foundational-
adventures/downloadable-
manuscripts/ #105](https://u.osu.edu/friedman.8/foundational-adventures/downloadable-manuscripts/)**

by

Harvey M. Friedman

July 12, 1018

5. INTERNAL INDUCTIVE UPPER SHIFT

NOTE: Our way of using $R_{<\min}[S]$ was incorrect, and so we only use $R_{<\max}(S)$. But now we write this simply as $R_{<}[S]$.

INDUCTIVE UPPER SHIFT. IUS. For order invariant $R \subseteq Q^k \times Q^k$, some $S = S\# \setminus R_{<}[S] \supseteq \text{ush}(S)$.

DEFINITION 5.1. The limited 1-sections of $S \subseteq Q^{k+1}$ are the sets $S_x = \{p < q: S(x,p)\} \subseteq Q$, for fixed $x \in Q^k$ and $q \in Q$.

INTERNAL INDUCTIVE UPPER SHIFT. IIUS. For order invariant $R \subseteq Q^{k+2} \times Q^{k+2}$, some S equalled to $S\# \setminus R_{<}[S]$ on $(-k, \infty)^k$ has elements and limited 1-sections including those of its upper shift.

THEOREM 5.1. IUS is provably equivalent to $\text{Con}(\text{SRP})$ over WKL_0 . IIUS is provably equivalent to $\text{Con}(\text{HUGE})$ over WKL_0 .