1133-37-157 **Muhammad U. Abdulla***, 150 West University Blvd., Melbourne, FL 32901, **Ugur G. Abdulla**, 150 West University Blvd., Melbourne, FL 32901, **Naveed H. Iqbal**, 150 West University Blvd., Melbourne, FL 32901, and **Jake Barrett**, 150 West University Blvd., Melbourne, FL 32901. *Minimal Orbits, Sharkovski Ordering and Universality in Chaos.*

We prove the outstanding conjecture on the number of third minimal odd periodic orbits of continuous endomorphisms on the real line. In a recent paper *Abdulla et al., International Journal of Bifurcation and Chaos,* **27***, 5, 2017* it is proved that there are $4k-3$ types of second minimal $2k+1$-orbits, $k \geq 3$, each characterized with unique cyclic permutations and directed graphs of transitions with accuracy up to inverses. In this paper, we prove that there are $8k^2+32k-110$ types of third minimal $2k+1$ periodic orbits, $k \geq 4$, each characterized with unique cyclic permutations and digraphs with accuracy up to inverses. The primary application of this result is to the problem of identifying and classifying the distribution of superstable periodic windows within the chaotic regime of bifurcation diagrams of the one-parameter family of unimodal maps. It was revealed in the referred featured article that by fixing the maximum number of appearances of periodic windows, a universal pattern of distribution arises. In particular, the second (or third) appearance of all orbits in the bifurcation diagrams were always a second (or third) minimal orbit, with both a Type 1 cyclic permutation (and respective digraph), and a unimodal topological structure. (Received July 23, 2017)