Abstract for an Invited Paper for the APR07 Meeting of The American Physical Society

## $\begin{tabular}{ll} \bf Nucleosynthesis \ in \ Supernovae \\ \it CHRIS \ FRYER, \ LANL \end{tabular}$

Since B<sup>2</sup>FH outlined both the processes and sites of element production, it has been known that the explosive outbursts from the final hurrah of the life of a massive star would be one of the prime sites for the formation of heavy elements. Until the last decade, most studies of these nucleosynthetic yields used simplistic 1-dimensional models. But in the last decade, scientists have begun to move beyond this spherically symmetric picture, introducing asymmetries in the explosion and incorporating state-of-the-art understanding of the explosion mechanism. We review this recent progress for a variety of core-collapse explosions and discuss how these new insights will shape our understanding of nucleosynthesis in the coming years.