A hierarchy of classes for Hamiltonian transformations

 $\begin{tabular}{ll} Nike & Dattani* \\ {\it Harvard-Smithsonian Center for Astrophysics} \end{tabular}$

 $\begin{array}{cc} {\rm Nicholas} & {\rm Chancellor}^{\dagger} \\ {\it Durham} & {\it University} \end{array}$

We define a hierarchy of classes for a miltonian transformations and categorize all known quadratization techniques according to the classes

 $^{^*}$ n.dattani@cfa.harvard.edu

 $^{^{\}dagger}$ nicholas.chancellor@durham.ac.uk