Visualising FCC Binary Derivative Superstructures TIM WENDLER, GUS HART, Brigham Young University —
We present a way to visualize multiple crystal structures in such a way that one can see their common origin. Binary FCC systems at non-fixed concentrations are shown to have periodicity on a larger scale. Enumerating derivative superstructures is useful in the search for naturally occurring crystal structures as the super-cells are based off primitive cells that are already known to exist. The visualization model we present is designed to display the research results accurately and stimulate the mind’s eye promoting useful inquisition for future research.