

There exist several formulations of mirror symmetry of K3 with anti-symplectic involution: Borcea, Nikulin, Dolgachev, Voisin... There are also versions for non symplectic automorphisms of higher order: Sarti, Artebani, Comparin, Priddis et al. We cast all this in a framework which only requires a weak Calabi-Yau condition. We get a mirror symmetry statement in all dimensions which specializes to a new statement of mirror symmetry of K3 surfaces with non-symplectic automorphisms of non prime order. This is work in collaboration with Kalashnikov and Veniani.