Gyu Whan Chang and Hwankoo Kim* (hkkim@hoseo.edu), School of Computer & Information Engineering, Hoseo University, Asan, 31499, South Korea. When is the w-integral closure of a domain a Krull domain? Preliminary report.

Let D be an integral domain with quotient field K and let $D^{[w]}$ be the so-called the w-integral closure of D in K; so if D is Noetherian or $\dim(D) = 1$, then $D^{[w]}$ is the integral closure of D. Mori–Nagata theorem states that the integral closure of a Noetherian domain is a Krull domain. In this talk, we show when $D^{[w]}$ is a PvMD (resp., Krull domain). (Received January 08, 2017)