1145-13-868 **Akeel Omairi*** (aomairi2015@fau.edu), 6019 Boca Colony Dr. Apt 215, Boca Raton, FL 3443, and **Lee Klingler**. *Unique Decomposition of Direct Sums of Ideals.*

Let R be a commutative Noetherian ring. We say that R has the unique decomposition into ideals (UDI) property if each finite direct sum of ideals of R is uniquely decomposable as a direct sum of indecomposable R- ideal. For integral domain R, Goeters and Olbering showed that R has UDI if and only if R has at most one nonprincipal maximal ideal and has UDI locally at that nonprincipal maximal ideal (if it exists). For local domain R, they gave necessary and sufficient condition that R has UDI in terms of its integral closure. Their results were extended to reduced (commutative Noetherian) rings by Ay and Klingler. We show that if R is any commutative Noetherian ring, then R has UDI if and only if R has at most one nonprincipal maximal ideal and has UDI locally at that nonprincipal maximal ideal (if it exists). We also give an example of a ring without UDI but which has UDI modulo its nilradical, so that the UDI property does not lift modulo the nilradical. (Received September 16, 2018)