1147-53-876 **Jeff A Viaclovsky*** (jviaclov@uci.edu) and **Jiyuan Han** (han556@purdue.edu). *Existence and compactness theory for ALE scalar-flat Kähler surfaces.*

Our main result is a compactness theorem which states that a noncollapsed sequence of asymptotically locally Euclidean (ALE) scalar-flat Kähler metrics on a minimal Kahler surface whose Kähler classes stay in a compact subset of the interior of the Kahler cone must have a convergent subsequence. As an application, we prove the existence of global moduli spaces of scalar-flat Kähler ALE metrics for several infinite families of Kähler ALE spaces. (Received January 29, 2019)