

1145-52-1957 **Ali Mohajer*** (mohajer@math.uic.edu), 1835 Soniat St, New Orleans, LA 70115. *A new upper density bound on binary packings of disks of radius 0.7 and 1 in the plane.*

In 2003, sharp upper density bounds were established by Aladar Heppes for two-radius packings which admit arrangements wherein each disk is tangent to a ring of disks, each of which is tangent to its two cyclic neighbors. In this talk we will develop methods for establishing upper density bounds for saturated two-radius packings of disks when no such regularity exists, and discuss recent progress in establishing a bound sharper than the best one known for a specific ratio of radii. (Received September 24, 2018)