512 circles in a circular quadrant
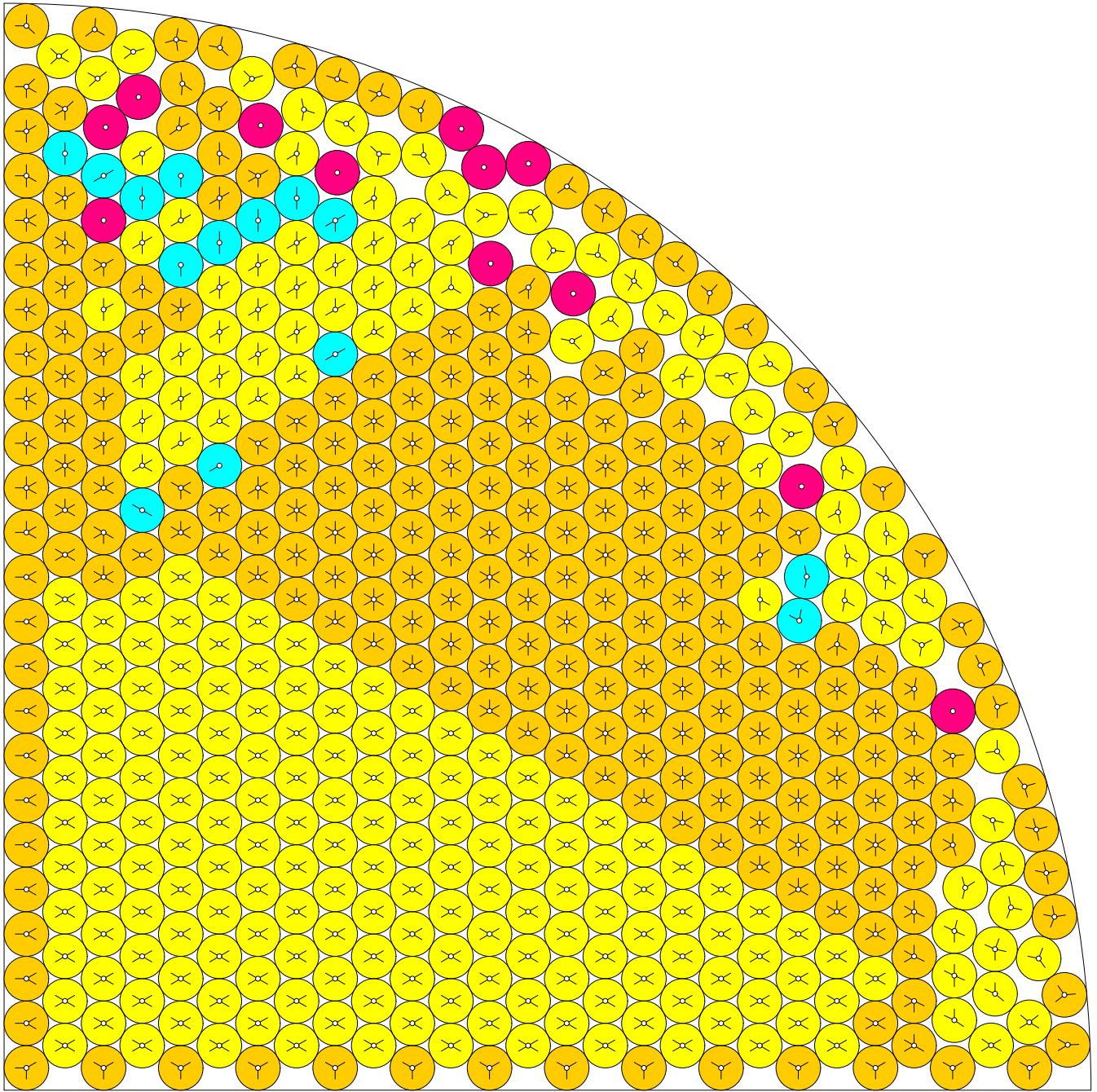
radius   =   0.020508051115   density = 0.861348168799
ratio   = 48.761337407408   contacts = 1099