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Amanda Redlich* (aredlich@bowdoin.edu). *The waiting game: Balanced allocation via random choices.*

We discuss a balanced allocation process, placing m balls into n bins. To place each ball, options are generated randomly, and then the best option is chosen. The algorithm dynamically waits “just long enough” before placing each ball into a bin. This variation on previous power-of-two-choices processes improves performance while decreasing computational complexity. It also has interesting implications for related processes (e.g. Achlioptas processes). Joint work with John Augustine and William K. Moses Jr. (IIT Madras) and Eli Upfal (Brown University). (Received August 30, 2016)