1145-60-957 **Adrian D. Banner*** (abanner@intechjanus.com), One Palmer Square, Suite 441, Princeton, NJ 08540. *Competing Diffusive Particle Systems and Models of Large Equity Markets: A Survey.*

Stock-price processes are often modeled as exponential semimartingales. One can model large equity markets with a collection of a large number of such processes, but special care must be taken to ensure that the model exhibits stability properties consistent with real-world observations. For example, the capital distribution of equity markets, along with average occupation times for given capitalization-ranks, are observed to be stable. This survey talk will focus on hybrid atlas-type models, which are constant-parameter models of exponential semimartingales, in which the growth rates and variances depend only on capitalization rank and stock identity. These models approximate the observed stability properties described above, while being simple enough to permit analytic study. The methodologies used in these analyses touch upon the question of triple points; in particular, some choices of parameters may permit triple points to occur, but there is no resultant effect on any stability properties. Joint works with T. Ichiba, I. Karatzas, R. Fernholz, V. Papathanakos, S. Pal and M. Shkolnikov. (Received September 17, 2018)