The referee has identified a number of areas in which the manuscript can be improved. We agree with all of the recommendations and have taken the action indicated below. We begin with the referee's observation quoted in bold font to distinguish it from our response that follows.

1. **"One weakness of the paper is its readability. It is not self-explanatory and therefore diffcult to understand. For example, to understand the time correlation formalism presented in Section 2.4, you must study secondary literature, in particular Balakrishnan (1978)."**

   The referee echos a criticism from the first referee and such unanimity suggests the need for change. We have developed a far more efficient derivation that permits the reader to follow the argument with much less math that retains, and hopefully amplifies, the central concepts.

2. **"Moreover, the introduction of the paper does not contain an economic literature overview."**

   We have added an economic literature overview to the Introduction.

3. **"It should be mentioned that methods of statistical physics have already been successfully applied in the theory of financial and security markets. It should further be discussed (and not only mentioned) that the heterogeneity approach is crucial for economic policy design. Are there any conflicts with the famous Lucas critique?"**

   We have added the requested mention of the use of methods of statistical physics in financial and securities markets, together with references. We have also added a discussion of why the heterogeneity approach is crucial for economic policy design. Finally, we also added a discussion of the Lucas critique; both in the economic literature overview in the Introduction and in the analysis of policy design in the Discussion and Summary.

4. **"The mathematical analysis contains a mistake."**

   The referee is correct. Typographical errors rendered a portion of the mathematical analysis incorrect. We very much thank the referee for this level of review. We have corrected the errors and simplified the exposition of this part of the derivation.