We would like to thank the reviewer for his/her detailed comments on the manuscript.

1. We have eliminated the reference to Newtonian dynamics.

2. We have eliminated the mathematical framework of former section 2 and combined the remaining text of section 2 with Introduction.

3. The more detailed description of the technique used and the physical meaning of eigenvectors and eigenvalues are given in the reference Rundle et al, 2000 and also in Rundle et al, 2006b.