The reviewers' comments are as follows:  
  
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Both reviewers have raised serious concerns about the manuscript, in particular, regarding the connection with [16] and the discussion of how the contribution in this manuscript improves upon [16]. Please read the comments from the reviewers carefully and address them, in particular:  
1. How does this contribution compare with [16]? Please describe the assumptions and applicability of the algorithms in [16] accurately.  
2. What is the novelty of this paper, in regards to [16] and related work? The claim that the algorithm reduces the cost from O(N^6) is misleading since in fact [16] has a computational cost comparable to the proposed algorithm. This should be correctly reflected in the abstract and introduction.  
3. Please address Reviewer 2's "Critique" section in details.  
  
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Reviewer #1: In the manuscript by Hu and Ma, a Fourier spectral method is proposed to solve the Boltzmann collision term for dilute granular gases. The contribution and related work are highlighted in the introduction. The methodology is new which deserves the publication in Journal of Computational Physics. The following points should be taken into account when revising.   
  
First, around lines 53 and 54, the authors mentioned that "the method by Wu et al. only works for 2D Maxwell molecules and 3D hard sphere…". This is absolutely not true as clearly stated in Ref. 16 (see the paragraph after Eq. 22) that the spectral method can handle the Enskog collision term with a general form of collision kernels, which has been demonstrated by the numerical results for hard-sphere, Maxwell, and soft-potential molecules in Fig. 2 therein.   
  
Second, in lines 60 and 61, evidence on the advantage of 'spherical design' over 'Gauss quadrature' should be provided.   
  
Third, G in Eq. 40 is calculated "exactly," while the gain term is approximated by quadrature. This may violate the mass conservation. This problem may be removed by calculating G using the same quadrature rule as for the gain term.  
  
Fourth, in Fig. 2 when comparing the direct method to the Fourier spectral method, the software, computer configurations, number of CPU cores used, etc. should be specified.    
  
Fifth, the accuracy of the proposed Fourier spectral method is proved in spatially homogeneous relaxation problems. The paper is a little bit short. I think at least one spatially-inhomogeneous problem should be simulated to test the stability of the present method because some deterministic numerical method fails to solve this problem although they can solve spatially homogeneous relaxation problems.   
  
Finally, the extendibility of the present method to deal with the Enskog collision term where the binary collision is not spatially localized need to be commented in order the compare the fast spectral method developed in Ref. 16.