Dear editor

First, we would like to thank the referee for valuable comments. Second, we should mention that we mistakenly submitted earlier version of the manuscript in proceedings of conference. So now we are submitting new version of the paper in which we considered cosmological constant with massless scalar field to investigate the inflationary cosmology and also quantum stability of cyclic universe. Hence, the new results are far more general than previous results. Moreover, we removed various references which are now balanced. Then, we revised the manuscript based on the referee's comments. Here is our respond to referee's comments:

1) Regarding the first issue raised by referee, we should point out that the effects of quantum fluctuation in LQC was investigated in the literature using generalized Gaussian states (please see arXiv:1105.5081, arXiv:1406.1486 and arXiv:1509.08899) and it was shown that such quantum fluctuations will generally lower the energy scale for the maximum energy for which the bounce occurs. Although this is done for flat LQC, one can assumes the same effects for closed LQC considered in this manuscript. In fact, large quantum fluctuations will only change the rate of nucleation probability. We added a discussion about this issue at page 8.

2) Regarding the second comment, we have to mention that in LQC the big bang is generally replaced with big bounce but this is true when one just considers the holonomy correction and the size of universe is always above some length for which the inverse scale factor is small. But when we are discussing about the tunneling wave function one needs to take into account the inverse scale factor correction since we are investigating the behavior of universe at zero scale factor. In fact, we should point out that going into zero scale factor is not in contradiction with the prediction of LQC that the spacetime is non-singular. We added a few words about this issue at the end of page 7.

Regards,
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