

Reviewer's Comments:

I went through the revised version of the manuscript and I consider that, even though some changes were implemented, the fundamental issue regarding the fact that the scientific content of the manuscript drastically overlaps with

D-Branes and Hilbert Schemes

<https://core.ac.uk/download/pdf/2550008.pdf><https://core.ac.uk/download/pdf/2550008.pdf>

still remains.

The rest of the manuscript is a recollection of very well known facts in topology, such as the computation of the Euler characteristic using the Dolbeault operator.

It is also not clear how the blow up construction for toric varieties was used at all for computations, as it was claimed.

Author's Feedback:

The scientific content of the manuscript overlaps with the article *D-Branes and Hilbert Schemes* only in the reference but not ideologically, because I have considered two methods of Hodge numbers interpretation for toric varieties that gives me to use the triangulation of such varieties for calculation of topological invariant – Euler-Poincare characteristic through the polyhedron from the one hand and through the matter content from the other hand. It is not only representation of Nakamura's algorithm in spite of the fact that there was not anywhere presented the result for the model $1/3(1,1,1)$ but It is the representation of the connection of the mathematical constructions (cones, fans, polyhedrons) with physical consequences, that are of importance for high energy physics.

My purpose was to give the clear connection of the obtained results with the known facts from mathematics, so I must say several words about the known facts in topology. I also don't think that all scientists know the Batyrev's constructions.

The blowing up construction for toric varieties was used in accordance with the Theorem of Batyrev's article, arXiv:alg-geom/9310003v1 5 Oct 1993, for the projective triangulation, that is fundamental fact in the building of the Hilbert scheme in my paper. Hilbert scheme can be associated with the physical interpretation of the number of generations of the Standard Model.