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**By Simulation Physics of Light by Rendering Software as Standard Render as of N-Enlargement Bounces from Glass Heart Object Get Similar Shape as Calabi Yau Variety Assumption**

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**Abstract**

There are wave-particle properties of light. On photoreal visualization, we see only wave properties of light, photo from CAD scripts render, and where are particle properties? Similar as for example thermal analysis, but other, by simulating physics of light by standard rendering software of n- enlargement bounces could enjoy particle properties, as from glass heart object get similar shape as Calabi Yau variety assumption.

**Keywords:** Physics of Light, Computer Simulations, Methods, Calabi Yau Variety, Wave-Particlele Duality

**1. Introduction**

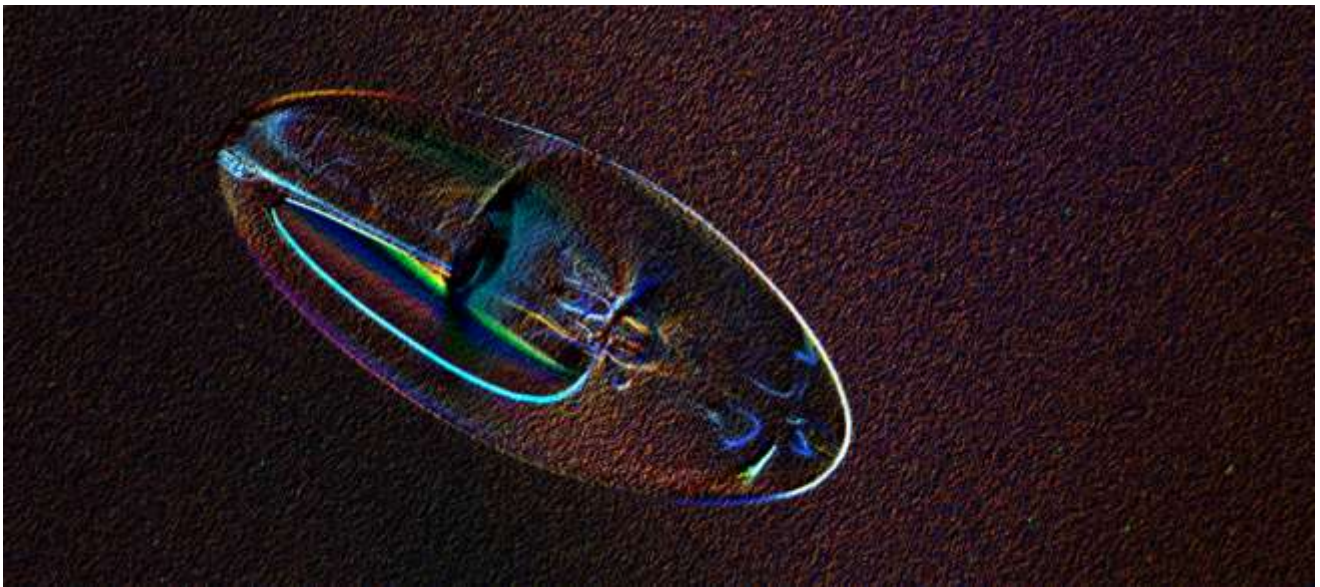
Einstein wrote: " It seems as though we must use sometimes the one theory and sometimes the other, while at times we may use either. We are faced with a new kind of difficulty. We have two contradictory pictures of reality; separately, neither of them fully explains the phenomena of light, but together they do. " (wave-particlele duality) [1] In the real world, light sources emit photons that normally travel in straight lines until they interact with a surface or a volume. When a photon encounters a surface, it may be absorbed, reflected, or transmitted. Some of these photons may hit the retina of an observer where they are converted into a signal that is then processed by the brain, thus forming an image. Similarly, photons may be caught by the sensor of a camera. In either case, the image is a 2D representation of the environment. The formation of an image as a result of photons interacting with a 3D environment may be simulated on the computer. The environment is then replaced by a 3D geometric model, and the interaction of light with this model is simulated with one of a large number of available algorithms. The process of image synthesis by simulating light behavior is called rendering. [2]

**2. Experimental**

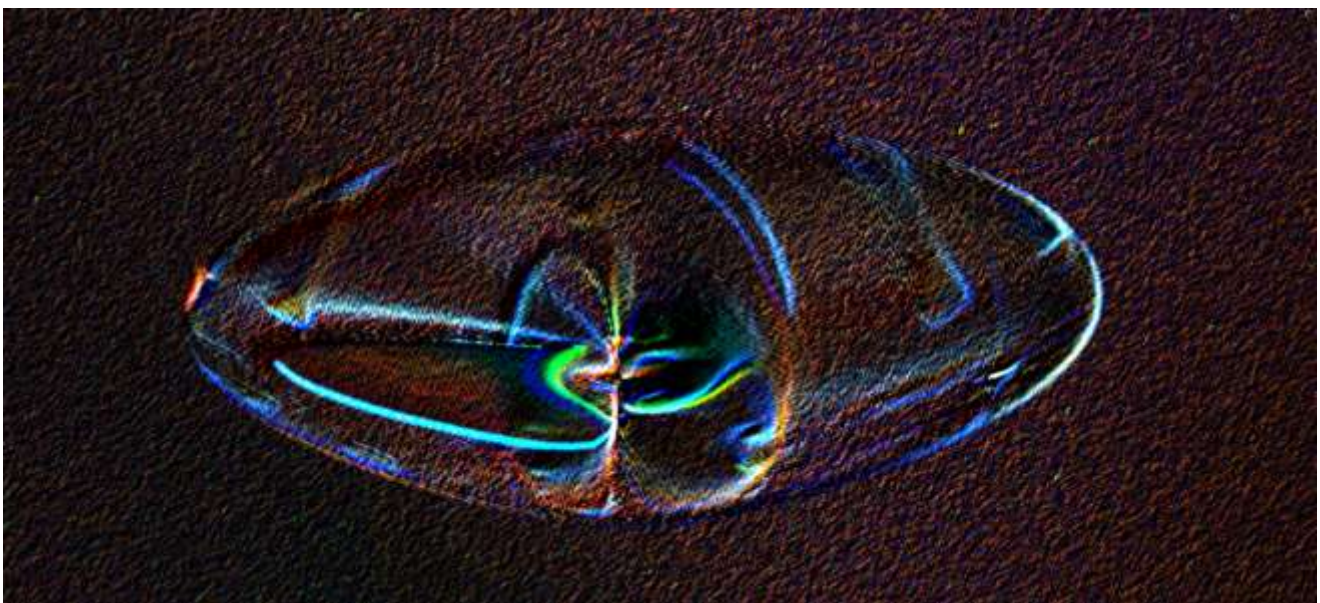
Möbius band could cut into two heart objects. By simulation physics of light by rendering software as standard render as of n-enlargement bounces from glass heart object get similar shape as Calabi Yau variety assumption.



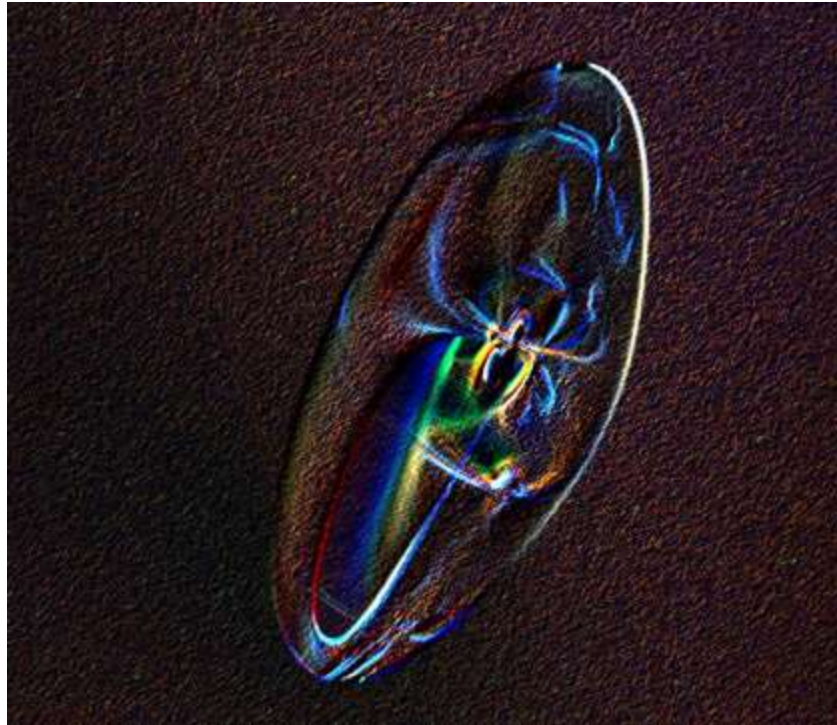
**2.1. Bottom view we could see similar shape as Klein bottle**



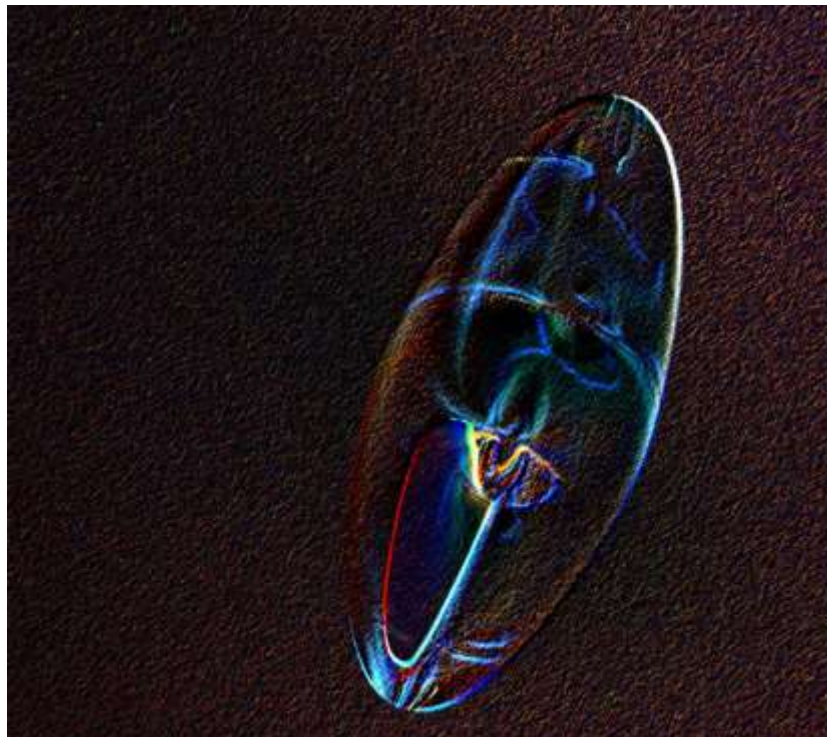
**Figure 1 Calabi Yau variety assumption bottom view, edge detect neon filter enhancement**



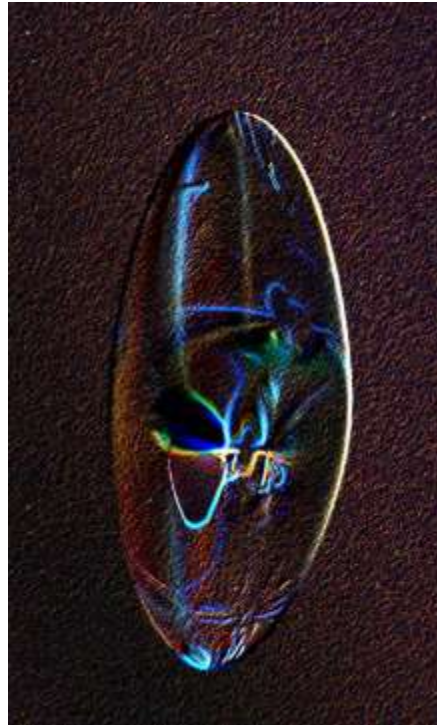
**Figure 2 Calabi Yau variety assumption bottom view, edge detect neon filter enhancement**



**Figure 3 Calabi Yau variety assumption bottom view, edge detect neon filter enhancement**



**Figure 4 Calabi Yau variety assumption bottom view, edge detect neon filter enhancement**

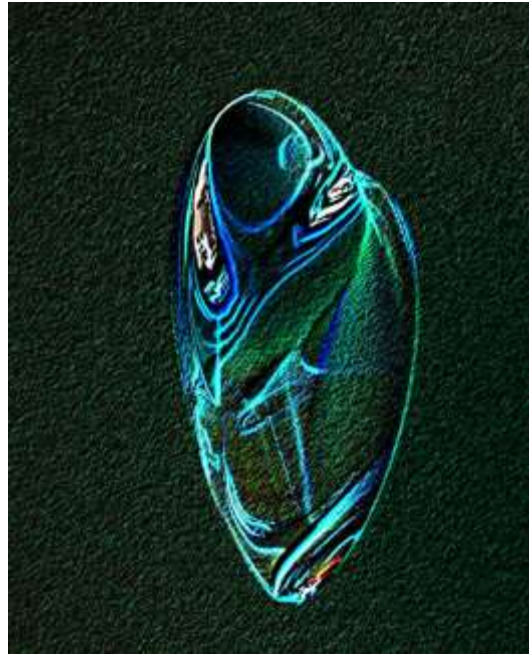


**Figure 5 Calabi Yau variety assumption bottom view, edge detect neon filter enhancement**

**2.2. Side view we could see similar shapes as cut of Möbius band**



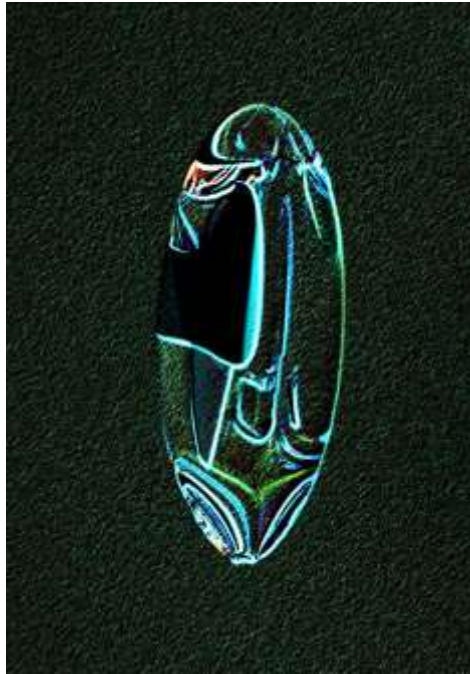
**Figure 6 Calabi Yau variety assumption side view, edge detect neon filter enhancement**



**Figure 7 Calabi Yau variety assumption side view, edge detect neon filter enhancement**

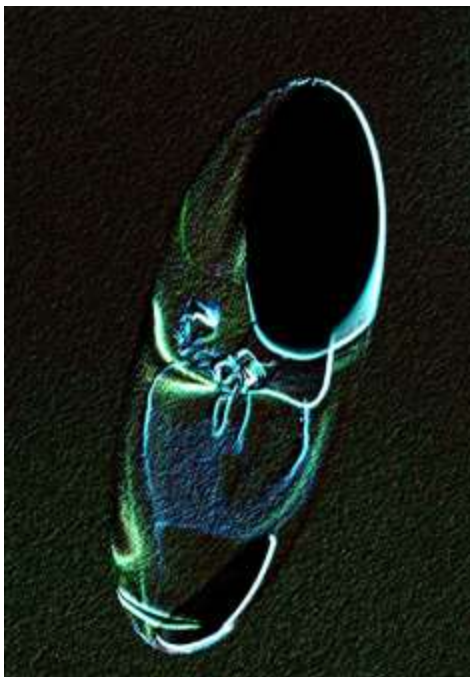


**Figure 8 Calabi Yau variety assumption side view, edge detect neon filter enhancement**

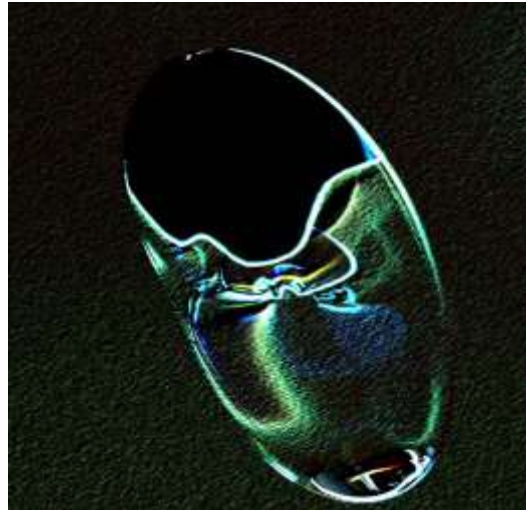


**Figure 9 Calabi Yau variety assumption side view, edge detect neon filter enhancement**

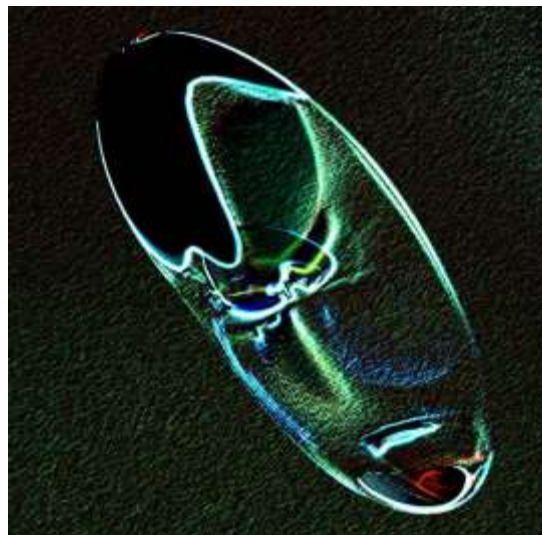
**2.3. Top view we could see black gap**



**Figure 10 Calabi Yau variety assumption top view, edge detect neon filter enhancement**



**Figure 11 Calabi Yau variety assumption top view, edge detect neon filter enhancement**



**Figure 12 Calabi Yau variety assumption top view, edge detect neon filter enhancement**

### 3. Conclusion

By simulation physics of light by rendering software as standard render as of n-enlargement bounces from glass heart object get similar shape as Calabi Yau variety assumption. Bottom view we could see similar shape as Klein bottle, side view we could see similar shapes as cut of Möbius band and top view we could see black gap. This new method calling RTDG technology could help String theory with question of using how many dimensions.

### References

1. Albert Einstein & Leopold Infeld, The Evolution of Physics, 1938, Edited by C.P. Snow, Cambridge University Press, ASIN: B000S52QZ4
2. Vishal, Verma, 3D Rendering - Techniques and Challenges, International Journal of Engineering and Technology Vol.2(2), 2010, 29, 33