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## Visualizing some aspects of unifying Theories

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The Quantum Cinema 3D animated geometry depiction model is based on the idea that geometry must not remain restricted to the plane 2-D page but the invention of digital media makes the appropriate outlook of higher mathematics possible and animated 3-D graphics are the new medium for a new geometry which is introduced here.

The basic discrete geometric model obeys the rules of the algebraic number field and allows a continuous evolution up to higher dimensions of space: The discrete space grid  $Z_5$  –comparable to the ontological significance of the „quintessence“ or „ether –enables to join electromagnetic phenomena such as light as turbulence in 5D space, the principles of relativity and the notion of time, the 4D behaviour of “space time” are embedded in 6D. The electric and magnetic forces as well as gravity find analogue geometrical entities. A 5D space cell performs permutations of algebraic elements.

(<http://shorts.quantumlah.org/from-the-pentagon-inequality-to-the-poincare-universe>)

### Summary

This digital geometry framework allows to visualize the wellknown mathematically accomplished unification theories by most of all Theodor Kaluza ‚s unification in 5D, Roger Penrose’s Twistor theory, String Theories and Garret Lisi’s E8 theory.

3D animated geometry enables the visualization of the imaginary (numbers) and finally provides a continuum of symmetries. A kaleidoscopic movie which gives new insights and physical interpretations for a commensurate recognition of so far abstract concepts.

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