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## Imbedding space

Imbedding space  $H = M^4 \times CP_2$

1. is Cartesian product of  $M^4$  and  $CP_2$  meaning that each point of Minkowski space  $M^4$  is replaced with very small compact 4-D space  $CP_2$  implying that H is 4+4=8-dimensional which together with 4-dimensionality of space-time inspires the number theoretical vision.
2. has Cartesian factor
  - (a)  $M^4$  which is the 4-D space-time of special relativity and corresponds to empty space-time in general relativity
  - (b)  $CP_2$  - 4-D complex projective space -
    - i. that is space of complex lines (real planes) of 3-complex- dimensional space  $C^3$ .
    - ii. which is representable as coset space  $SU(3)/U(2)$ . This also supports number theoretical vision.
    - iii. whose geometry codes for standard model quantum numbers and fields.