

Why $M^4 \times CP_2$ is unique?

1. Twistor Grassmannian approach has led to a breakthrough in $\mathcal{N} = 4$ SUSY relies on 4-D conformal invariance having Yangian extension.
2. The basic problem in twistorialization of general relativity the empty Minkowski space M^4 is the only space-time with Minkowskian signature of metric allowing twistor space is solved in TGD framework since imbedding space M^4 allows twistor space.
3. CP_2 is the only 4-D compact space with Euclidian signature of metric allowing twistor space with Kähler structure and identifiable as the flag manifold $SU(3)/U(1) \times U(1)$ parametrizing the choices of color quantization axes so that $M^4 \times CP_2$ is completely unique.