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**On the manifold of tripotents in  $JB^*$ -triples. (English summary)**

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The set of Jordan triple idempotents (tripotents)  $M$  in a  $JB^*$ -triple  $Z$  is a Banach manifold in a natural way. For example, if  $Z = \mathcal{L}(H, K)$  is the space of bounded linear operators between complex Hilbert spaces  $H$  and  $K$ , with triple product  $\{uv^*w\} = (uv^*w + wv^*u)/2$  for  $u, v, w \in \mathcal{L}(H, K)$ , the tripotents correspond to the partial isometries. In this paper, the authors define a natural affine connection on  $M$  in terms of the Peirce projections of  $Z$ , determine the associated geodesics and realize  $M$  as a fibre space over a symmetric Kähler manifold (in the case where  $Z$  is a classical Cartan factor).

Reviewed by *Harald Upmeyer*

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*Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.*

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