

Ugarte, Luis**Hodge numbers of a hypothetical complex structure on the six sphere.** (English)[Zbl 0996.53046](#)

Geom. Dedicata 81, No. 1-3, 173-179 (2000).

From author's abstract: The author proves that the terms $E_r^{p,q}(S^6)$ in the Frölicher spectral sequence associated to any hypothetical complex structure on S^6 would satisfy Serre duality. It is also shown that the vanishing of the Dolbeault cohomology group $H^{1,1}(S^6)$ ensures the existence of a holomorphic 2-form on S^6 living even in $E_2^{2,0}(S^6)$, which in particular implies the nondegeneration of Frölicher's sequence at the second level.

Reviewer: [A.P.Stone \(Albuquerque\)](#)**MSC:**[53C56](#) Other complex differential geometry[55T99](#) Spectral sequences in algebraic topology[53C15](#) General geometric structures on manifolds (almost complex, almost product structures, etc.)

Cited in 1 Review
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