

On the uniqueness of the octonionic instanton solution on conformally flat 8-manifolds

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The solution of octonionic instantons on the 8-sphere is given by Grossman–Kephart–Statsheff [B.Grossman et,al, Comm. Mat. Phys. vol. 96, 431–437 (1984)]. We use the notion of ”strong self-duality” defined in previous work, to prove that if conformally flat 8-manifold admits such a solution then it has to the 8-sphere.