

Instantons on General Noncommutative R^4

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Abstract: We study the U(1) and U(2) instanton solutions of gauge theory on general noncommutative R^4 . In all cases considered we obtain explicit results for the projection operators. In some cases we computed numerically the instanton charge and found that it is an integer independent of the noncommutative parameters $\theta_{1,2}$.

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Key words: instanton, noncommutative gauge theory, ADHM construction

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