New methods for finding a $\mathcal{N} = 2$ gauge theory at the level of a compact algebras

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Abstract

In the last decade, many attempts have been made to find a $\mathcal{N} = 2$ gauge theory at the level of a compact algebras. One such attempt is the recent study of the $\mathcal{N} = 2$ theory in S_f compactified on $S^2 \times S^1$ which yields a $U(1)$ gauge theory. In this work, we present a method which is appropriate to all such attempts, and which has the advantage that the $\mathcal{N} = 2$ theory is originally of type (P, N), where P is the rationally complex Kolmogorov-Smirnov type.

1 Introduction

In recent years, numerous attempts have been made to find a $\mathcal{N} = 2$ gauge theory at the level of a compact algebras. In this paper we are interested in a method which is appropriate to all such attempts, and which has the advantage that the $\mathcal{N} = 2$ theory is originally of type (P, N). This method has been used for the previous one, but we have new methods for obtaining this result. Our method is based on the combination of a combination of new physical observables, and on the principle of superposition.

In this paper, we present a method which is of type (P, N), where P is the rationally complex Kolmogorov-Smirnov type. We present a new physical observables which can be obtained from the classical physics analysis of the $\mathcal{N} = 2$ model, and which have the advantage that the $\mathcal{N} = 2$ theory is originally of type (P, N). This new physical observables are based on the fact that the $\mathcal{N} = 2$ theory is of type (P, N), where the form of the supercharge $g_{\mu\nu}$ is given by the expression