

# Yang-Mills Instanton Sheaves

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The  $SL(2, C)$  Yang-Mills instanton solutions constructed recently by the biquaternion method were shown to satisfy the complex version of the ADHM equations and the Monad construction. Moreover, we discover that, in addition to the holomorphic vector bundles on  $CP^3$  similar to the case of  $SU(2)$  ADHM construction, the  $SL(2, C)$  instanton solutions can be used to explicitly construct instanton sheaves on  $CP^3$ . Presumably, the existence of these instanton sheaves is related to the jumping lines of the  $SL(2, C)$  instantons on  $S^4$  which do not exist for  $SU(2)$  instantons.