

1147-03-71

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In 1993, K.G. Johnson asked whether there is an analytic set which does not belong to the  $\sigma$ -algebra generated by Jordan measurable sets. This question was answered via a set theoretical method by Mauldin. We use a recursion theoretical method to give another solution to the question. We also gave a recursion theoretical description to the question which  $\sigma$ -ideals have approximation property under the assumption that every real is constructible, which was studied by Kechris and Solecki under certain large cardinal hypothesis. (Received November 28, 2018)