

## **Markov Operators on Hermitian $2 \times 2$ Matrix Spaces with $p$ -order**

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### **ABSTRACT**

In this work the Markov operators on the space of  $2 \times 2$  matrices with  $p$ -order are studied. In this case the general form of the Markov's operators is found. Sufficient conditions for an operator to be Markov in this spaces given. The regularity, accuracy and periodicity of the Markov's operator is investigated.

Keywords: Markov operator, Hermitian matrix, regularity, accuracy, periodicity,  $p$ -order.