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**Title:** Maps preserving Heinz means on positive cones in  $C^*$ -algebras

**Author(s):** Jingsheng Wang, Lei Li and Liguang Wang

In this paper, we study the maps that preserve the Heinz mean on positive definite cones of unital  $C^*$ -algebras. In order to do this, we characterize the order in  $C^*$ -algebras using the Heinz means.

**Address:**

Jingsheng Wang  
School of Mathematical Sciences  
Qufu normal University  
Qufu 273165  
China

**Address:**

Lei Li  
School of Mathematical Sciences  
and LPMC  
Nankai University  
Tianjin 300071  
China

**Address:**

Liguang Wang  
School of Mathematical Sciences  
Qufu normal University  
Qufu 273165  
China