

# 國立清華大學數學系學術演講

## NTHU MATH Colloquium

講題      Toward finiteness of central configurations for the planar six-body problem by symbolic computations

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地點      綜三101  
<https://reurl.cc/0EK069>

### **Abstract**

Central Configurations (C.C.) and Newtonian  $n$ -body problem are special and important in celestial mechanics. There are some problems about central configurations, and one of them is about the finiteness conjecture: for any choice of  $n$  positive masses, there are only finitely many similarity classes of C.C. . In 2012, Albouy and Kaloshin settled the 5-body case of planar version of finiteness conjecture for most masses. Based on Albouy and Kaloshin's approach, we use symbolic computations on this problem. In this talk, we will introduce C.C., some problems on C.C., the finiteness conjecture, Albouy and Kaloshin's approach, and the application of symbolic computations.