

Lunar Exploration (3)  
Lunar Mission updates (1A)

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## AN OVERVIEW OF THE DESIGN AND ANALYSIS OF CHANG'E 4 MISSION

### **Abstract**

Chang'e 4 lunar probe will softly land on the South-Pole Aitken Basin (SPA) on the farside of the moon about 2018 for the first time of all mankind and carry out in-situ exploration. In this paper, an overview of the mission design of Chang'e 4 are introduced and the key factors, including the landing site selection, landing control, relay communication orbit selection, relay link design, moon night operation, ground test verification, scientific payload selection, are analysed and designed optimally to provide top-level design for the engineering development of Chang'e 4 mission.