Pf-P001

Room: Poster

The differential VLBI observation of Lunar Prospector

Yusuke Kono [1], Nobuyuki Kawano [2], Hideo Hanada [3]

[1] Dept. of Math. and Phys. Sci., Grad. Univ. Advanced Studies, [2] Div. Earth Rotation, NAO, [3] Div. Earth Rotation, Nat. Astr. Obs.

VRAD(VLBI radio sources on the Moon and on the relay satellite) mission measures amplitudes of the physical librations and the gravity field of the Moon by differential VLBI. These radio sources are launched in 2003 under SELENE project. We made a preliminary Observation of the Lunar Prospector of NASA. In this experiments we determined the fringe phase within the accuracy of about 1 degree. This result shows that the observation system for VRAD can determine the fringe phase within the accuracy of 10 degrees and the relative position between the two radio sources within the accuracy of 1 m.