

U052-001

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Future of Space and Planetary Sciences

Hiroko Nagahara[1]; Masato Nakamura[2]; Shigeru Ida[3]

[1] Dept. Earth Planet. Sci., Univ. Tokyo; [2] ISAS/JAXA; [3] Dept. of Earth and Planetary Sci., Tokyo Inst. of Tech.

The objective of space and planetary science is to understand the laws of origin and evolution of stars and planetary systems, which includes the rule of evolution of planets and lives, because the evolution of planets is mutually related to the evolution of lives.

Recent remarkable progress includes finding of surprising features of exo-planets, which are beyond our previous understanding on planet formation, and arrival of the era of solid planet exploration, which has come after successful achievement of magnetosphere, interplanetary space, and the sun.

Future space and planetary sciences will focus on (1) demonstrative studies on the origin and evolution of the solar system and dynamics of the planets, (2) investigation of universality of planet formation, evolution and dynamics mainly on the basis of theoretical studies, and (3) advancement of exo-planetary system studies, particularly on the habitability of lives in planets.