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IAF SPACE EXPLORATION SYMPOSIUM (A3)

Space Exploration Overview (1)

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POSSIBLE MOON RESEARCH AND EXPLORATION SCENARIOS BASED ON RUSSIA'S PARTICIPATION IN INTERNATIONAL CIS-LUNAR STATION DEEP SPACE GATEWAY

Abstract

According to the strategic documents for space activities of Russian Federation the main direction of prospective human flights missions after 2025 is the Moon. Some elements of Russian lunar program are planned in the actual Federal space program for 2016-2025, for instance robotic spacecraft, crew vehicle, and launch vehicles. Furthermore participation in the international project Deep Space Gateway – cis-lunar station, is under discussion at the present time. This paper presents Roscosmos approaches to planning prospective lunar research and exploration scenarios, based on Deep Space Gateway opportunities. International component in Russian lunar scenarios is considered and synergetic effect of Russia's participation in international exploration programs is discussed. The paper considers prospects for international cooperation in Moon exploration and expected results for the near future. The results of the study will be used in planning future Russian lunar exploration programs.