

YOUNG PROFESSIONALS VIRTUAL FORUMS (YPVF)
Space Communications and Navigation (SCAN) (1)

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EXPERIMENTS PROGRAM FOR NASA'S SPACE COMMUNICATIONS TESTBED

Abstract

NASA developed a testbed for communications and navigation that was launched to the International Space Station in 2012. The testbed promotes new software defined radio (SDR) technologies and addresses associated operational concepts for space-based SDRs, enabled by this first flight of NASA's Space Telecommunications Radio System (STRS) architecture standard. The experiments program consists of a mix of in-house and external experiments from partners in industry, academia, and government. The experiments will investigate key challenges in communications, networking, and global positioning system navigation both on the ground and on orbit. This presentation will discuss some of the key opportunities and challenges for the testbed experiments program.