Two Russian cosmonauts aboard the International Space Station played chess against an Earth-bound grandmaster on Tuesday, in a celebration of the first such game half a century ago.

Equipped with an electronic chessboard, cosmonauts Anatoly Ivanishin and Ivan Vagner played in zero gravity against 30-year-old Russian former child prodigy Sergei Karyakin.

The game was broadcast live and ended in a draw after about 15 minutes.

It was organised by the space agency Roscosmos and the Russian Chess Federation to celebrate the 50th anniversary of the first Space-Earth game of chess played on June 9, 1970.

"It's a huge honour for us not to lose to a grandmaster," Ivanishin said, while Vagner added that US astronauts on the ISS watched the game and gave tips.

Karyakin, who played from Moscow's Museum of Cosmonautics, said he was jittery during the game.