1. Record Nr. UNISA996574861903316 2021 IEEE International Conference on Wireless for Space and Extreme Titolo Environments (WiSEE): 12-14 October 2021, Cleveland, Ohio, USA // Institute of Electrical and Electronics Engineers Piscataway, New Jersey:,: IEEE,, 2021 Pubbl/distr/stampa **ISBN** 1-66540-371-3 Descrizione fisica 1 online resource (120 pages): illustrations Disciplina 629.1 Soggetti Aerospace engineering Space environment Wireless communication systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Spaceflight involves critical sensing and communication in extreme Sommario/riassunto environments such as planetary surfaces, space vehicles, and space habitats The many challenges faced in space sensing and communication are extremely diverse and overlap significantly with those found in many terrestrial examples of extreme environments such as extreme hot or cold locations, extreme high or low pressure environments, critical control loops in aircraft and nuclear power plants, high speed rotating equipment, oil gas pipelines and platforms, etc All of these environments pose significant challenges for radio frequency or optical wireless sensing and communication and will require the application of a broad range of state of the art technologies in order to generate reliable and cost effective solutions Although the specific challenges vary significantly from the environment to

environment, many of the solutions are discussed in this conference.