1. Record Nr. UNINA9910156331103321 Proceedings of the 12th Reinventing Space Conference / / edited by **Titolo** Scott Hatton Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-34024-7 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (VI, 242 p. 157 illus., 144 illus. in color.) 629.1 Disciplina Soggetti Aerospace engineering **Astronautics** Space sciences Aerospace Technology and Astronautics Space Sciences (including Extraterrestrial Physics, Space Exploration and Astronautics) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Skimsats: Bringing Down the Cost of Earth Observation -- Rethinking Private Property in Outer Space -- Cubesats to Support Mars Exploration Three Scenarios for Valuable Planetary Science Missions --Technology or Law: Which will Reach Mars First? -- Paradigm Change in Earth Observation - Skybox Imaging and Skysat-1 -- Next Generation Novasar Development -- Designing for Cost Effectiveness Results in Responsiveness: Demonstrating The Sstl X-Series -- Thinking Differently About Standard Smallsat Interfaces- Let Adapters Take the Brunt -- Msr Iod Study: Low Cost End-to-End In Orbit Demonstration of Key Technologies for the Msr Mission -- The Small Satellite Integrated Communication Environment (ICE) -- Spartan: Scramjet Powered Accelerator for Reusable Technology Advancement -- The Disruptive Potential of Subsonic Air-Launch -- Sprite, A Very Low-Cost Launch

Vehicle for Small Satellites -- An Emerging Marketplace: Low Earth Orbit and The International Space Station -- The Austral Launch

Reduction Potential for Earth Observation Satellites -- Air Launched

Reusability, Modularity and Simplicity -- Quantifying the Cost

Vehicle: 2014 Progress in Reducing Space Transportation Cost Through

Sommario/riassunto

Space Transportation Systems -- S.O.F.I.A: Solar Orbiters For Imaging AsteroidsS.O.F.I.A: Solar Orbiters For Imaging Asteroids -- The North Star Rocket Family.

The 2014 Reinventing Space conference presented a number of questions in the context of a constantly innovating space industry, from addressing the future of global cooperation, investigating the impact of cuts in US government spending on the private space sector, and probing the overall future of the commercial launch sector. Space tourism and new technology promise the revival of interest in space development (the Apollo Era was the first period of intense space activity and growth). The need to create dramatically lower cost, responsive and reliable launch systems and spacecraft has never been more vital. Advances in technology are allowing smaller and cheaper satellites to be orbited - from cubesats to nanosatellites to femtosatellites. Thanks to more efficient new launch possibilities, low cost access to space is becoming ever more achievable. Commercial companies and countries are targeting the industry with new funding. Organised by the British Interplanetary Society, the presentations at this conference thoroughly address these challenges and opportunities.