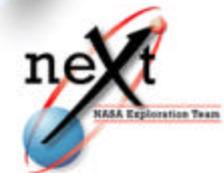




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Summary of Workshops Sponsored/Co-Sponsored by NEXT (1 of 5)

- **Workshop for Identification of In-Space Transportation Infrastructure to be Manufactured in Space**
 - **Date/Location:** June 11-13, 2002; Huntsville, AL
 - **Sponsor:** NEXT Transportation Working Group
 - **Purpose/Objectives:** To answer basic questions pertaining to the creation of a space transportation infrastructure:
 - What kinds of space activities would a transportation infrastructure enable and serve, and with what functional characteristics?
 - What are the generic elements of a suitable infrastructure?
 - Which of these elements should or can only be manufactured in space, and with what required manufacturing technologies?
 - What are the enabling avenues of research and technology development that must be pursued?
 - **Workshop Report:** Contact David Harris/MSFC
<mailto:david.c.harris@msfc.nasa.gov>

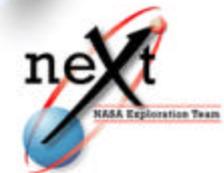


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Summary of Workshops Sponsored/Co-Sponsored by NEXT (2 of 5)

- **Workshop on Technology for Human and Robotics Exploration and Development of Space (THREADS) and Revolutionary Aerospace Technologies (RATWG)**
 - **Date/Location:** August 13-15, 2002; Washington, D.C.
 - **Sponsor:** NEXT THREADS Team and RATWG
 - **Purpose/Objectives:** To identify and assess innovative architectures, revolutionary concepts and technology needs and opportunities for a wide range of prospective future exploration and commercial development of space activities
- **Workshop on Revolutionary Aerospace Technologies**
 - **Date/Location:** August 16, 2002; Washington, D.C.
 - **Sponsor:** NEXT Revolutionary Aerospace Technologies Working Group (RATWG)
 - **Purpose/Objectives:** To identify the most impactful technologies that, if given sufficient development support, could revolutionize exploration and development of space.
 - **Workshop Report:** Contact Neville Marzwell/NASA JPL
<mailto:Neville.I.Marzwell@jpl.nasa.gov>



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Summary of Workshops Sponsored/Co-Sponsored by NEXT (3 of 5)

- **Space Radiation Shielding Technology Workshop**
 - **Date/Location:** April 3-5, 2002; Hampton, Virginia
 - **Sponsor:** Space Access and Explorations Program Office, NASA Langley Research Center
 - **Purpose/Objectives:**
 - To develop a comprehensive understanding of design methods and requirements, by bringing together experts in engineering, space and nuclear physics, technology, materials science, and radiation safety.
 - To identify advanced engineering design tools, including the use of immersive reality and web-based frameworks, to enable new design practices that take into account the totality of mission, vehicle, and habitat designs - to meet the challenge of perfecting efficient and affordable radiation shielding
 - **Website:** <http://sirest.larc.nasa.gov/workshop02/>



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Summary of Workshops Sponsored/Co-Sponsored by NEXT

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• Human Operations 2001

- **Date/Location:** November, 2001; Houston, TX
- **Sponsor:** NEXT Humans as a Subsystem Working Group; NASA JSC Advanced Technology Integration Group
- **Purpose/Objectives:**
 - To learn about common technology needs and solutions
 - To foster collaborative technology development
- **Website:** <http://advtech.jsc.nasa.gov/humanOps.shtm>

• Environmental Sentinels 2002

- **Date/Location:** September 17-18, 2002; Houston, TX
- **Sponsor:** NASA JSC Advanced Technology Integration Group
- **Purpose/Objectives:** The focus of Environmental Sentinels 2002 is advanced technologies for monitoring physical, chemical, and microbial contaminants in the human environment. This environment could be a heavily populated urban area, an industrial site, the military theater, or human-rated systems in the vast reaches of space. As with every technology event, the two objectives are:
 - To learn about common technology needs and solutions
 - To foster collaborative technology development
- **Website:** http://advtech.jsc.nasa.gov/events_of_interest.asp

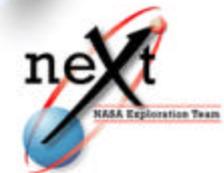


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Summary of Workshops Sponsored/Co-Sponsored by NEXT (5 of 5)

- **In-Space Assembly and Maintenance of Complex Science Facilities**
 - **Date/Location:** May 21-24, 2002; College Park, MD
 - **Sponsor:** NEXT Exploration Science Working Group and Human/Robotic Working Group
 - **Purpose/Objectives:**
 - To review the high probability in-space earth and space-science missions for NASA within the next 20 years. (with emphasis on observatory class missions)
 - To develop corresponding road maps for the technologies required to construct and maintain the systems supporting these missions using human and robotic agents
 - To formulate recommendations for technology development efforts that will optimize the utilization of human and robotic resources for the construction and maintenance of future large space platforms.
 - **Website:** <http://iscworkshop.larc.nasa.gov/>



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NEXT FY02 Publication Summary

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Abbott, R. and Aceves, M., *Self-engaging Connector System for Robotic Outposts and Reconfigurable Spacecraft*. IEEEAC paper #478 (Updated November 12, 2001), 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Abbott, R., *Application Specific Connector Systems*. IEEEAC paper #479 (Updated Nov 19, 2001), 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Akin, D.L. and Bowden, M.L., *EVA, Robotic, and Cooperative Assembly of Large Space Structures*. 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Anderson, B.M., Nealy, J.E., Wilson, J.W. and Simonsen, L.C., *CAD Model of Astronaut Radiation Exposures During EVA: Nominal and Extreme Scenarios*. 2002-01-338, Society of Automotive Engineers 32nd International Conference on Environmental Systems (ICES), 15-18 July 2002 / San Antonio Texas, USA.

Atwell, W.; Semones, E. and Cucinotta, F.: *Phantom torso experiment on the international space station; flight measurements and calculations*. F2.5-0011-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Bering III, E.; Brukaradt, M. and Chang-Diaz, F.: *Ion Dynamics and ICRH Heating in Exhaust Plasma of VASIMR Engine*. IAC-02-S.P.06, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Boucher, M.F., Hodgson, E., Murray, S.K., Lee, P. and Braham, S., *Investigation of EVA Information Interface Technology in a Mars Analog Arctic Field Science Setting*. 02ICES-213, 32nd International Conference on Environmental Systems (ICES),

Caplan, B.: *Lessons Learned from NASA's Recent Experiences in Space Commerce*. IAC-02-IAA.3.2.03, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Cataldo, B.: *Nuclear Power System Evolution: Mars Robotic Outposts to Human Exploration*. IAC-02-R.4.02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

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Chang-Diaz, F.: *Fast, Power Rich Space Transport Key to Human Exploration and Survival*. IAC-02-Q.6.05, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Charles, J.; Leveton, L.; Sawin, C.; Robinson, J. and Rummel, J.: *The Bioastronautics Critical Path Roadmaps: Biomedical Basis for Long Duration Space Flight*. IAC-02-G.5.05, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Clem, J.; Wilson, J.; Goldhagen, P. and De Angelis, G.: *Preliminary Validation of Computational Procedures for a New Atmospheric Ionizing Radiation (AIR) Model (solicited)*. F2.4-0016-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Cloudsley, M.S., Hienbockel, J.H., Badavi, F.F. and Wilson, J.W., *Shuttle Induced Neutron Environment: Computational Requirements and Validation*. 2002-01-332, Society of Automotive Engineers 32nd International Conference on Environmental Systems (ICES), 15-18 July 2002 / San Antonio Texas, USA.

Connolly, J.: *Exploring the Path Less Traveled: A Comparison of Unique Mars Sample Return Architectures*. IAC-02-Q.3.1.07, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Cooke, D.; Joosten, B.; Lo, M.; Ford, K. and Hansen, R.: *Innovation in Mission Architectures for Human and Robotic Exploration*. IAC-02-Q.6, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Cucinotta, F., *Space Radiation Cancer Risk Projections for Exploration Missions: Uncertainty Reduction and Mitigation*. NASA/TP-2002-210777, August 2002.

Cucinotta, F.: *In Vivo and In Vitro Measurements of Complex Chromosomal Exchanges Induced by Heavy Ions*. F2.2-0007-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Cucinotta, F.; Schimmering, W.; Peterson, L.; Wilson, J.; Sagamti, P. and Dicello, J.: *Uncertainties in Projecting Risks of Late Effects from Space Radiation*. F2.1-0027-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

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(3 of 10)

De Angelis, G.; Clem, J.; Goldhagen, P. and Wilson, J.: *A new dynamical Atmospheric Ionizing Radiation (AIR) model for epidemiological studies.* F2.4-0015-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

De Angelis, G.; Cloudsley, M.; Nealy, J.; Tripathi, R. and Wilson, J.: *Radiation Analysis for Manned Missions to the Jupiter System.* F2.1-0036-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

De Angelis, G.; Cloudsley, M.; Singletary R. and Wilson, J.: *A New Mars Radiation Environment Model with Visualization.* F2.1-0010-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

De Angelis, G.; Wilson, J.; Tripathi, R.; Cloudsley, M. and Nealy, J.: *A Radiation Analysis of Lunar Surface Habitats.* IAC-02-IAA.13.P.09, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Doggett, W., *Robotic Assembly of Truss Structures for Space Systems and Future Research Plans.* 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Easter, R., *A New Method to Compare the Performance of Humans, Robots, and Integrated Human-Robot Systems in 21st Century Space Operations.* JPL Publication 01-13, October 2001.

Ferebee Jr, M.; Breckenridge, R. and Hall Jr, J.: *Revolutionary Aerospace Systems Concepts - Planning for the Future of Technology Investments.* IAC-02-U.1.04, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Fullerton, R. and Trevino, R., *Review of Components for Large Spacecraft Implementation.* 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Fullerton, R.: *What's NEXT for EVA.* IAC-02-IAA.10.1.03, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Geffre, J.: *Conceptual Design of a Lunar LI Gateway Outpost.* IAC-02-Q-3.3.05, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

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George, J.; Hoffman, S.; Rachocki, K.; Edgett, L.; Dow, S.; Herman, A. and Coverstone, V: *Near Term Mars Sample Return Spacecraft Design Using Solar Electric Propulsion*. IAC-02-Q.3.3.05, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Goldhagen, P.; Clem, J. and Wilson, J.: *Recent results from measurements of the energy spectrum of cosmic-ray induced neutrons aboard an ER-2 airplane and on the ground*. F2.4-0011-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Gomez, G.; Lo, M.; Masdemont, J. and Museth, K.: *Simulation of Formation Flight Near L2 for the Terrestrial Planet Finder (TPF) Mission*.

Gross, A.; Briggs, G.; Hieronymus, J.; Clancy, D. and Smith, B.: *Advances in Autonomous Systems for Missions of Space Exploration*. IAC-02-IAA-13.1.09, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Gross, A.; Muscettola, N.; Clancy, D.; Smith, B.; Barrett, A. and Mjølssness, E.: *Advanced Autonomous Systems for Space Operations*. IAC-02-U.5.03, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Henley, M.; Fikes, J.; Howell, J. and Mankins, J.: *Space Solar Power Technology Demonstration for Lunar Power Applications: Laser-Photovoltaic Wireless Power Transmission*. IAC-02-R4.04, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Henley, M.; Howell, J. and Mankins, J.: *Wireless Power Transmission Options for Space Solar Power*. IAC-02-R.4.08, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Henninger, D.: *Integrated Human Exploration Mission Simulation Facility*. COSPAR F4.2-0001-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Hoffman, S.; George, J.; Connolly, J. and Joosten, K.: *Use of Solar Electric Propulsion to Enhance Mars Sample Return Missions*. IAC-02-Q.3.3.06, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

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Howell, K.C., Marchand, B.G. and Lo, M.W., *Temporary Satellite Capture of Short-Period Jupiter Family Comets from the Perspective of Dynamical Systems*. Journal of Astronautical Sciences, Vol. 49, No. 4.

Humboldt, C.; Mandell Jr., H.; Derkowski, B.; Fontana, P. and Fincher, R: *Drilling for Water on Mars Using Commercial Technologies: An Enabling Precursor to an Early, Affordable Human Mars Mission*. IAC-02-IAA-13.3.02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Ilin, A.; Chang-Diaz, F. and Squire, J.: *Radio Frequency Field Calculations for Plasma Heating Simulations in VASIMR*. IAC-02-S.P.07, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Johns, B.D., Fan, K.Y. and Singleterry, R.C., *Development of a Collaborative Engineering Environment*. 02-ICES-2552, Society of Automotive Engineers 32nd International Conference on Environmental Systems (ICES), 15-18 July 2002 / San Antonio Texas, USA.

Jones, H. and Rock , S., *Dialogue-Based Human-Robot Interaction for Space Construction Teams*. IEEEAC paper #322 (Updated November 13, 2001), 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Katwata, T.; Cucinotta, F.; George, K.; Wu, H.; Shigematsu, N.; Furusawa, Y.; Uho, T.; Isobe, K. and Ito, H.: *Chromosome aberrations in ataxia telangiectasia cells exposed to heavy ions*. F2.2-0009-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Kim, M.Y., Thibeault, S.A., Kiefer, R.L., Wilson, J.W., and Buckley, J.D., *Processing of Structural Shielding Materials for Martian In-situ Resource Utilization*. AIAA 2002-0466.

Koon, W.S., Lo, M., Marsden, J.E. and Ross S., *Constructing a low energy transfer between Jovian moons*. Contemporary Mathematics 292, 129-146.

Kos, L.; Johnson, L.; Jones, J.; Trausch, A.; Eberle, B. and Woodcock, G: *Performance Requirements for a Nuclear Electric Propulsion*. IAC-02-S.4.02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

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Lo, M.W. and Chung, M.K., *Lunar Sample Return via the Interplanetary Superhighway*. AIAA 2002-4718, Proceedings of AIAA/AAS Astrodynamics Specialist Meeting, August 2002 / Monterey, California, USA.

Lo, M.W., *The Interplanetary Superhighway and the Origins Program*. 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Mankins, J. and Vallerani, E.: *Strategies and Concepts for Future Space Exploration and Development*. IAC-02-IAA.13.1.01, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Mankins, J.: *Establishing a Biosphere Beyond the Earth – Challenges of a Large Scale Habitat on the Moon*. IAC-02-IAA.13.2.08, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Mankins, J.: *The Promise and Challenge of Space Solar Power in the 21st Century*. IAC-02-R.1.02, 53rd International Astronautical Congress 10-19 October 2002 / Houston, Texas, USA.

Manzella, D.; Jankovsky, R and Hofer, R.: *Laboratory Model 50kW Hall Thruster*. AIAA-2002-3676, 38th AIAA Joint Propulsion Conference, 7-10 July 2002 / Indianapolis, Indiana, USA.

Martin, G. and Guerra, L.: *NASA Exploration Team Recent Accomplishments*. IAC-02-Q.6.03, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Marzwell, N.: *An Economic Analysis of Space Solar Power and its Cost Competitiveness as a Supplemental Source of Energy for Space and Ground Markets*. IAF-02-R.3.05, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

McBrayer, J.D., *An Overview of Sandia National Laboratories' MEMS Activities*. 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

McKeever S.W.S., Banerjee, D., Blair, M., Clifford, S.M., Cloudsley, M.S., Kim, S.S., Leuschen, M., Prather, M., Reust, D., Sears, D.W.G., and Wilson, J.W., *Concepts and Approaches to In-situ Luminescence Dating of Martian Sediments*. 10TH International Conference on Luminescence and Electron Spin Resonance Dating, June 2002 / Reno, Nevada, USA.

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Muller, R.M., *Assembly and Servicing of a Large Telescope at the International Space Station*. IEEAC paper #102, 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Petro, A.: *A Plasma Rocket Demonstration on the ISS*. IAC-02-T.P.08, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Plachta, D.; Kittel, P.: *An Updated Zero Boil-Off Cryogenic Propellant Storage Analysis Applied to Upper Stages or Depots in an LEO Environment*. AIAA-2002-3589, 38th AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit, 7-10 July 2002 / Indianapolis, Indiana, USA.

Purvis, L.R., *A Method for Estimating Costs and Benefits of Space Assembly and Servicing by Astronauts and Robots*. 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Qualls, G.D., Troutman, P.A., Wilson, J.W. and Nealy, J.E., B.M. Anderson, *Inter-Crew Shielding Against a Solar Particle Event in L1*. 2002-01-2335, Society of Automotive Engineers 32nd International Conference on Environmental Systems (ICES), 15-18 July 2002 / San Antonio Texas, USA.

Rodriguez, G., Weisbin, C.R. and Easter, R., *A New Method to Evaluate Human-Robot System Performance*. NIST/DARPA/IEEE/NASA Workshop on Performance Metrics for Intelligent Systems, 13-15 August 2002 / Gaithersburg, MD, USA.

Rodriguez, G., Weisbin, C.R. and Easter, R., *New Method for Human-Robot Performance Evaluation*. Journal on Autonomous Robots, Kluwer-Publishers, December 2002 (Also in JPL Publication 01-13, October 2001).

Rodriguez, G. and Easter, R., *A New Method to Evaluate Human-Robot System Performance*. Special issue on Space Robotics; Autonomous Robots Journal , 2002.

Schenker, P.S., Easter, R. and Rodriguez, G., *Space Robotic Colonies*. Encyclopedia of Physical Sciences and Technology, Third Edition, Volume 15, 2001.

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Semones, E.; Gibbons, F.; Golightly, M.; Weyland, M.; Johnson, A.; Smith, G.; Shelfer, T. and Zapp, N.: *Measurement of absorbed dose during the phantom torso experiment on the International Space Station*. F2.5-0010-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Shavers, R.; Zapp, N.; Barber, R.; Wilson, J.; Qualls, G.; Toupes, L.; Ramsey, S.; Vinci, V.; Smith, G. and Cucinotta, F.: *Implementation of ALARA radiation protection on ISS through polyethylene shield augmentation of the Service Module crew quarters*. F2.1-0012-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Snook, K., Henninger, D., Tri, T., Hoffman, S. and Dickerson, P.W., *Supporting Future Human Planetary Exploration with Earth Analog Investigations and Missions*. IAC-02-IAA.13.3.04, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Squire, J.; Chang-Diaz, F.; Jacobson, V.; McCaskill, G. and Winter, D.: *Experimental Research Progress of the VASIMR Engine*. IAC-02-S.4.03, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Taylor, R. and Bordi, F.: *A Brief Overview of NASA's Nuclear Systems Initiative*. IAC-02-R.4.02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Thronson, H.; Caroff, L.; Prusha, S. and Geffre, J.: *Next Steps Beyond LEO: InSpace Human Construction of Space Observatories*. IAC-02-Q.6.07, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Tripathi, A.: *A Containment Vault for a Shuttle Return of a Mars Sample*. IAC-02-Q3.1.10, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Tripathi, A.: *Mars Sample Return Mission Shuttle Rendezvous Option*. Presentation, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Tripathi, R.; Wilson, J.; Cucinotta, F.; Anderson, B. and Simonsen, L.: *Optimized shield materials trade study for lunar/gateway mission*. B0.3-F3.3-0028-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

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Tripathi, R.K., *A Generalized Weizsäcker-Williams Method Applied to Pion Production in Proton-Proton Collisions*. NASA/TP 2002-211938, September 2002.

Tripathi, R.K., *Calculation of the Coulomb Fission Cross Sections for Pb-Pb and Bi-Pb Interactions at 158 A Ge*. NASA/TP 2002-211929, September 2002.

Tripathi, R.K., *Radiative Energy Loss by Galactic Cosmic Rays*. NASA/TP 2002-211930, September 2002.

Tripathi, R.K., Simonsen, L.C., Nealy, J.E., Troutman, P.A. and Wilson, J.W., *Shield Optimization in Simple Geometry for the Gateway Concept*. 2002-01-2332, Society of Automotive Engineers 32nd International Conference on Environmental Systems (ICES), 15-18 July 2002 / San Antonio Texas, USA.

Tripathi, R.K., *String Fragmentation Model in Space Radiation Problems*. NASA/TP 2002-211933, September, 2002.

Troutman, P.; Mazanek, D.; Stillwagen, F.; Antol, J.; Sarver-Verhey, T.; Chato, D.; Saucillo, R.; Blue, D.; Siegfried, W.H.; Carey, D. and Krizan, S.: *Orbital Aggregation and Space Infrastructure Systems (OASIS)*. IAC-02-IAA.13.2.06, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Tweed J.; Wilson, J. and Tripathi, R.: *Improved Green's Function Technique for Ion Beam Transport*. F2.1-0008-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Ware, J., Ferl, J., Wilson, J.W., Cloudsley, M.S., de Angelis, G., Tweed, J. and Zeitlin, C.J., *Design and Testing of Improved Spacesuit Shielding Components*. 2002-01-330, Society of Automotive Engineers 32nd International Conference on Environmental Systems (ICES), 15-18 July 2002 / San Antonio Texas, USA.

Watson, J.J., Collins, T.J. and Bush, H.G., *A History of Astronaut Construction of Large Space Structures at NASA Langley Research Center*. 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

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Weisbin, C.R., Rodriguez, G. and Easter, R., *New Method to Evaluate, Optimize, and Forecast Human and Robot Performance in 21st Century Space Operations*. First International Congress on Autonomous Intelligent Systems, 12-15 February 2002 / Geelong, Australia (Also in Proceedings of LaRC/ICASE Workshop on Human-Robot Systems, Hampton, VA, November 5, 2001).

Weisbin, C.R., Schenker, P.S., Easter, R. and Rodriguez, G., *Space Robotic Colonies*. Encyclopedia of Physical Sciences and Technology, Third Edition, Volume 15, 2001.

Willenberg, H.J., Fruhwirth, M.A. and Potter, S.D., *Site Selection and Deployment Scenarios for Servicing of Deep-Space Observatories*. 2002 IEEE Aerospace Conference, 9-16 March 2002 / Big Sky, Montana, USA.

Wilson, J. et al.: *Space Radiation Transport Methods Development*. F2.1-0009-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Wilson, J., *Transport of Space Environment Electrons: A Simplified Rapid-Analysis Computational Procedure*. NASA/TP-2002-211448, March 2002.

Wilson, J.; Cloudsley, M.; Cucinotta, F.; Tripathi, R.; Nealy, J. and DeAngelis, G.: *Deep Space Design Environments for Human Exploration*. F2.1-0002-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Wilson, J.; Goldhagen, P.; Rafnson, V.; Clem, J. and De Angelis, G.: *Overview of Atmospheric Ionizing Radiation (AIR) Research: SST – Present (solicited)*. F2.4-0001-02, 53rd International Astronautical Congress, 10-19 October 2002 / Houston, Texas, USA.

Wilson, J.W., Korte, J.J., Heinbockel, J.H., Cloudsley, M.S., Badavi, F.F. and Troung, A., *Ionizing Radiation: Multifunctionality and MDO Processes*. 2002-01-2334, Society of Automotive Engineers 32nd International Conference on Environmental Systems (ICES), 15-18 July 2002 / San Antonio Texas, USA.

Wilson, J.W., Tripathi, R.K., Cucinotta, F.A., Heinbockel, J.H. and Tweed, J., *Towards a 3D Space Radiation Transport Code*. 2002-01-2333, Society of Automotive Engineers 32nd International Conference on Environmental Systems (ICES), 15-18 July 2002 / San Antonio Texas, USA.

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NEXT Reports

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Title	Date	Author/Point of Contact
Artificial Gravity for Human Exploration Missions (Presentation)	July 16, 2002	B. Kent Joosten NASA JSC mailto:kent.joosten@jsc.nasa.gov
NASA Exploration Team (NEXT) – Summary of Inputs to the 2 nd Generation Reusable Launch Vehicle Program (Presentation)	May 30, 2002	Bret Drake NASA JSC mailto:bret.g.drake1@jsc.nasa.gov
NASA Exploration Team Report – Charting America’s Course for Exploration and Discovery in the Twenty-first Century (Presentation)	May 2002	Doug Cooke NASA JSC mailto:douglas.r.cooke1@jsc.nasa.gov
Earth’s Neighborhood Exploration and Beyond: The NEXT Design Reference Missions (Presentation)	June 2002	Doug Cooke NASA JSC mailto:douglas.r.cooke1@jsc.nasa.gov
Exploration Requirements for Earth to Orbit (Presentation)	May 14, 2002	Doug Cooke NASA JSC mailto:douglas.r.cooke1@jsc.nasa.gov
Lunar Sample Return via the Interplanetary Superhighway (Presentation)	August 6, 2002	Martin Lo NASA JPL mailto:Martin.Lo@jpl.nasa.gov ftp://nav.jpl.nasa.gov/pub/LagrangeGroup/next/
The InterPlanetary Superhighway and the Development of Space (Presentation)	May 2002	Martin Lo NASA JPL mailto:Martin.Lo@jpl.nasa.gov ftp://nav.jpl.nasa.gov/pub/LagrangeGroup/next/
Filled-Aperture Infrared (FAIR) Telescope Assembly (Presentation)	December, 2001	Jim Geffre NASA JSC mailto:james.r.geffre1@jsc.nasa.gov
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Statistical Assessment of Shielding Approaches for Reducing Deep Space Galactic Cosmic Ray Cancer Risks (Presented at the Space Radiation Shielding Technology Workshop)	April 2002	Frank Cucinotta NASA JSC mailto:francis.a.cucinotta1@jsc.nasa.gov
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