

Dr. Robert Singleterry, Jr
Aerospace Technologist, NASA Langley Research Center
Thursday September 15, 2005
[Charley's Restaurant](#), 707 Graves Mill Rd., Lynchburg, VA 24502

"Space Radiation Engineering"

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This talk will be an introduction to the understanding needed to design, engineer, and test new spacecraft from space (and other) radiations. This will include the computational tools needed, an introduction to space radiation physics, and what is needed for near and long term stays outside low earth orbit.

Dr. Singleterry received his PhD, MS, and BS degrees in Nuclear Engineering with a PhD Minor in Mathematics from the University of Arizona in 1993, 1990, and 1984. He has worked at the E.I. Hatch Nuclear Power Plant from 84-85 as a Reactor Engineer, E.I. International from 85-89 as a Software Engineer, as a summer intern at Argonne National Laboratory West from 89-93, and as a Staff Engineer at Argonne from 93-97. Since 1997, Dr. Singleterry has worked at the NASA Langley Research Center in Hampton, VA. He is now in the Computational Structures and Materials Branch working on space radiation engineering and related issues and is a NASA Administrator's Fellow. As the team lead for a web-based, integrated radiation design tool, Dr. Singleterry is responsible for innovative ways of carrying out particle transport and computing faster to include reconfigurable computing techniques. He is also researching material layouts for spacecraft design, advanced particle transport methods, and airborne shielding experiments.

Dr. Singleterry has been an ANS member since 1982 (student, associate, and full). He has been a part of the Mathematics and Computation Division since then. He has served as their secretary for one year, and is now an Executive Committee member. He initiated the Aerospace Nuclear Science and Technology Technical Group and was Chair for two years. He is currently their Treasurer. He is also a life member of the Idaho Local Section (and was able to attend a recent pizza party) and a member of the Virginia Local Section. Dr. Singleterry has participated within ANS over the years in National Meetings, Division and Technical Group activities, and in local sections. His interest in becoming a board member is to help streamline ANS to be competitive as a society so that members will see the value in an ANS membership and either return to the society or make it their first choice for participation and technical discussions.