

Recent Developments and Applications of the MARS15 Code

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February 23, 2006

Abstract

Recent developments of the MARS15 Monte Carlo code system are described. These include inclusive and exclusive nuclear event generators, extended particle list in both modes, heavy-ion capability, electromagnetic interactions, enhanced geometry, tracking, histogramming and residual dose modules, and improved external interfaces. A few examples of the code benchmarking by the user community are shown. The use of the new features is demonstrated in the code applications at high-intensity proton and electron accelerators and colliders.

*E-mail: mokhovfnal.gov. Work supported by the Universities Research Association, Inc., under contract DE-AC02-76CH03000 with the U. S. Department of Energy.