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Genetic Mutation using Small Neutron Source

Thursday, 13 April 2023 16:00 (20 minutes)

Fast neutron irradiation gives a higher LET than gamma radiation, making it a very effective approach for mutagenesis and is widely used to create mutants in many plant species. Neutron irradiation is mainly performed using nuclear reactors and, more recently, accelerators, but both are limited to large facilities, and general access to their use is a bottleneck. In this talk, we report the possibility of fast neutron irradiation using a small neutron source, evaluated using particle and heavy ion transport code (PHITS).

Speaker's Title

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