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Radioactive Branching Using Dice

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ABSTRACT

Dice rolling (Emeric,1997) is a useful pedagogical tool (Arthur & Ian,2012; Todd, Clifton, Ingrid, Zdravko,2006)) to introduce students to the concepts and essential features of radioactivity. It can be extended to explain radioactive branching. In the process, the students learn about half life, decay constant and activity of a radioactive substance. Terms like stochastic processes, probability of decay, statistical fluctuations, and mutually exclusive processes; becomes clear in this process.

KEYWORDS

Radioactivity; Probability; Transition Rate; Half Life; Radioactive Branching

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