Branching Ratio

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Synonyms

[Branching fraction](#)

Definition

In chemistry and physics, the branching ratio is the ratio of the rate constant for a particular product of a reaction to the rate constant for the total set of possible products. For example, in nuclear physics, the branching ratio for a decay process is the ratio of the number of particles which decay via a specific decay mode with respect to the total number of particles which decay via all decay modes. It is also equal to the ratio of the partial decay constant to the overall decay constant.

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