

Peer Review Input for the Second Project:

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Note: [Please refer this to a C++ coder](#)

1 A Brief Overview of the Project

In this project, I am planning to study the probabilistic nature of a hypothetical decay of an X-Particle. We Assume that this particle can decay into one of the two other particles (Σ , Δ) releasing a big amount of energy in the form of electromagnetic rays.

The secondary particles, Σ and Δ can also decay into three other particles " α , β , and γ ". α , β , and γ shares many properties but they have the different flavors.

My plan is to use the binomial probability distribution to work with the decay of the X-Particles into Σ and Δ and then I will be applying the categorical probability distribution to get the analysis of the decays of these two particles into the third set of particles.

I will set two distinct hypotheses to simulate the data. The two hypotheses will push us to get two different sets of results.