Alaa'd Weekly Update Sept. 28rd

Last week's minutes:
- Check trigger requirements and where they should be captured

<div align="center">

Still in progress

</div>

- See if you can create a weighted event level efficiency instead of throwing away events
  Done in theory, currently validating and next would be encoding

- Continue working on automating this process

$$N_{Expected} = \frac{N_{Surviving} \times \sigma \times L}{N_{Generated}} = \frac{N_{Accepted} \times eff \times \sigma \times L}{N_{Generated}}$$

$$random_1 <= eff_1 \mid\mid random_2 <= eff_2 \longrightarrow \textcolor{green}{\textbf{\textit{Pass}}}$$

$$P(E_1 \ AND \ E_2) = e_1 \times e_2 = 1 - P(Both \ E_1 E_2 \ NOT \ Passing)$$

$$= 1 - P(NONE \ Passing) - P(ONLY \ ONE \ Passing)$$

$$P(2 \ or \ more \ \mu \ passing) = 1 - \left[\prod_{i=1}^{n}(1 - e_i) + \sum_{i=1}^{n} \left(e_i \times \prod_{j \neq i}(1 - e_j) \right) \right]$$