$$T_{GW} - t_n < T_N < T_{GW} + t_f(z)$$

$$LLH = \min_{t} \left(\sum_{i=1}^{i=NEvents} \left\{ \sum_{j=NBins}^{j=NBins} [x_j \ln \lambda_j - \lambda_j] + \frac{(t-t)}{2\sigma_t^2} + \frac{(E-\overline{E})}{2\sigma_E^2} \right\} \right)$$