

Figure 1: **Diagram of toy experiment steps.** The three colored boxes indicate the three steps of our toy experiment. The left box (almond) summarizes the MC and data generation. The center box (salmon) indicates the step in which we apply the detector response. The right box (lilac) summarizes the MC reweighting, data and MC histogramming, and final likelihood evaluation from the histograms. This final lilac box is repeated for each likelihood evaluation.

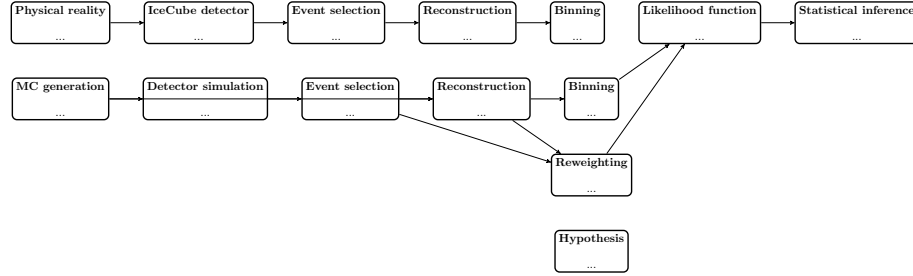


Figure 2: **Diagram of toy experiment steps.** The three colored boxes indicate the three steps of our toy experiment. The left box (almond) summarizes the MC and data generation. The center box (salmon) indicates the step in which we apply the detector response. The right box (lilac) summarizes the MC reweighting, data and MC histogramming, and final likelihood evaluation from the histograms. This final lilac box is repeated for each likelihood evaluation.