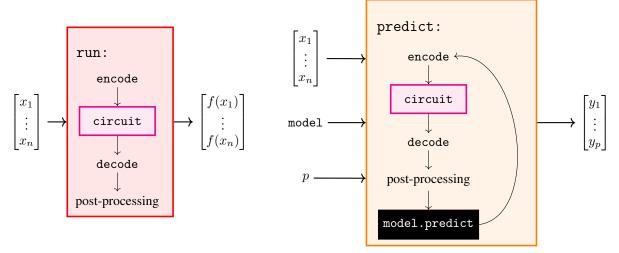


(a) A functional overview of the hidden quantum circuit architecture common to all quantum reservoirs, where x_t is the observed input sequence. The customized before, during, and after methods are applied sequentially to the quantum system.



sequence.

- **(b)** The input timeseries is encoded into the quantum circuit. After measurements are decoded from the quantum circuit, they are post-processed into the transformed feature vector.
- (c) The feature vector produced by encoding, decoding, and preprocessing is used by the model to predict the next step in the timeseries. This process is repeated p times and returns the resulting prediction