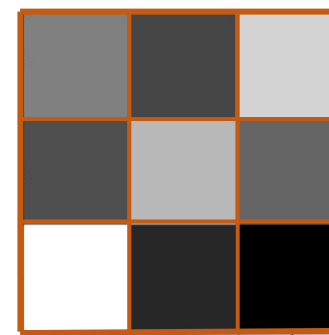




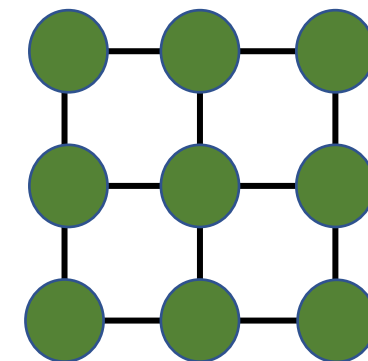
Original image



Averaging, PCA, CNN, etc

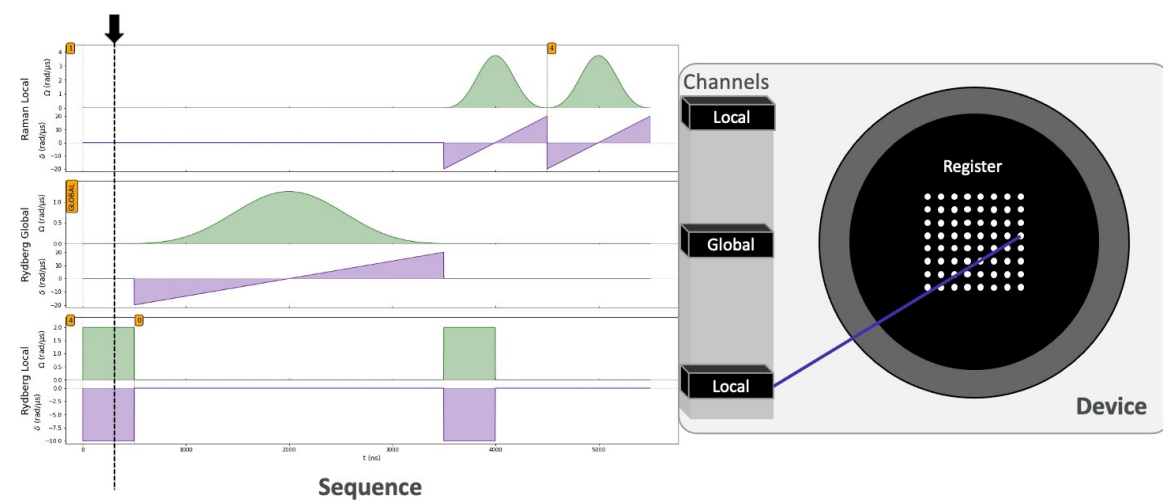


Reduced image

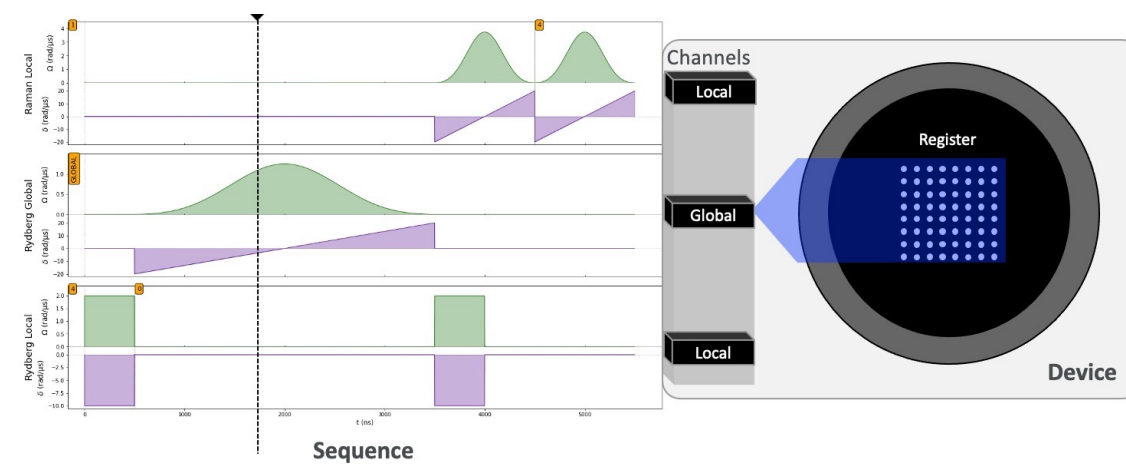


Associated array of atoms

Step 1: Dimensionality reduction, feature extraction



Step 2: Encoding of the features with local pulses



Step 3: Parameterized sequence of global pulses

$$\text{output} = \text{sigmoid}\left(\frac{1}{N} \sum_{i=1}^N \langle \psi | Z_i | \psi \rangle\right)$$

>.5

<.5

Defect

No defect

Step 4: Measurement and output of the final result