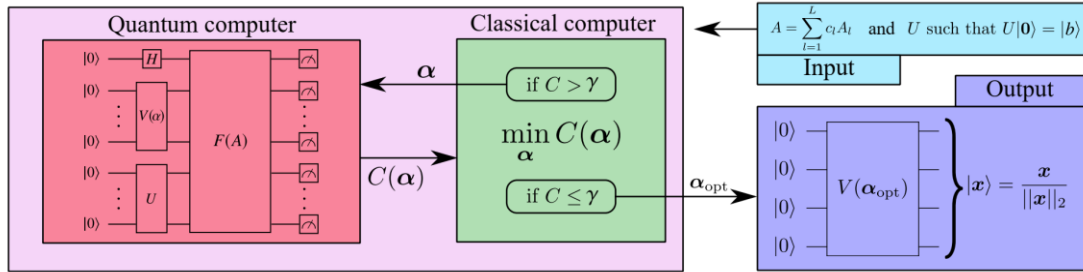# Summary of results

1. Algorithm

Fig 1: Schematic diagram for the VQLS algorithm.

2. Example

Input: $|b\rangle = (H \otimes H \otimes H)|000\rangle$, $A = 0.25(I \otimes I \otimes I) + 0.75(I \otimes I \otimes Z)$.
Output: x, where Ax=b.

3. Results

```
    fun: 1.295935325718034e-08
  maxcv: 0.0
message: 'Optimization terminated successfully.'
   nfev: 156
 status: 1
success: True
      x: array([3.14154187, 0.95194946, 0.89340399, 2.14178952,
1.62493701,
      4.03514298, 0.57095282, 2.2437122 , 0.92722322])
Solution:
[   0.22360824+0.j       0.22361047+0.j        0.22364906+0.j
0.22355195+0.j
 -0.44723179+0.j -0.44723291+0.j -0.4471858 +0.j -0.44720761+0.j]
(0.9999999870406493+0j)
```