| Speed-up    | Source of speed-up                          | Examples of algorithms |
|-------------|---|------------------------|
| Exponential | Dimensionality of the Hilbert space         | Hamiltonian simulation |
|             | Precise polynomial approximations           | Improved HHL algorithm |
| Quadratic   | Singular value = square root of probability | Grover search          |
|             | Distinguishability of singular values       | Amplitude estimation   |
|             | Singular values close to 1 are more useful  | Quantum walks          |