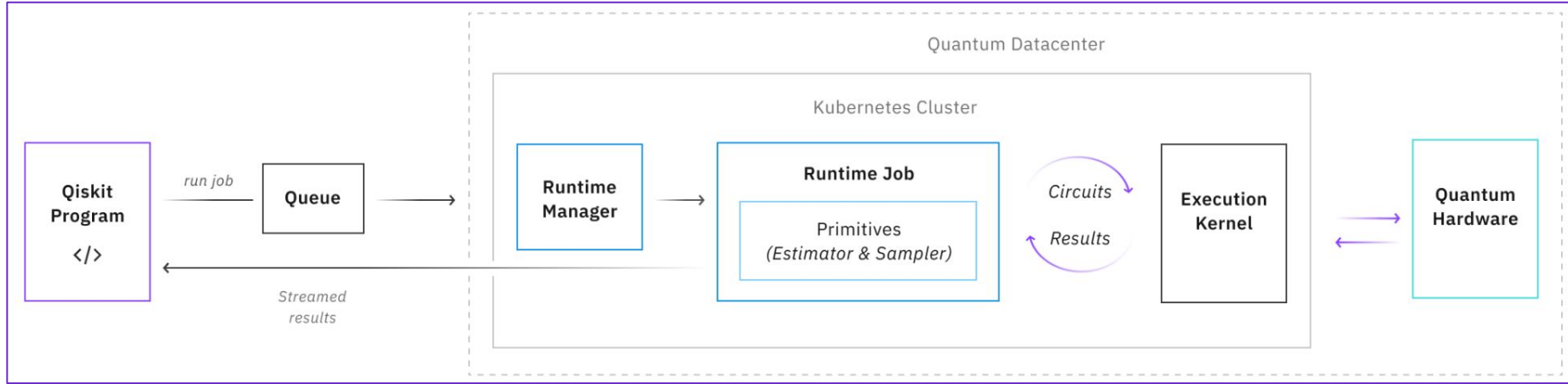# QAMP fall-22

#24: Writing an Unity Plugin for 'Using a Qiskit Runtime' using C#

Mentor: *Marcel Pfaffhauser*

Mentee: *Jyoti Faujdar*

What is Qiskit Runtime??

Primitives :
- *Estimator* : expectation values
- *Sampler* : quasiprobabilities

How to make is useful for non-python developers??

By having *Unity Plugin* that can directly call some *qiskit runtime* programs, making it easier for *C#/Unity* developers to use.

In this project, we are taking an example of '*Image Processing*' out of various possibilities for a runtime to be used.

This '*Image Processing*' example without the qiskit runtime have been implemented previously [1]

[1] https://github.com/qiskit-community/QuantumBlur

https://github.com/TigrisCallidus/QuantumBlurUnity

Deliverables of the project

An easy to use *unity plugin* including a unity package for easy installation

This unity package will make it possible to call our runtime directly from Unity/C#

And a simple example scene showing how to use this plugin

Thank You!!