# Meeting Agenda

Date: January 20, 2021

Time: 5:30 PM

Location: Zoom (<https://queensu.zoom.us/j/91329314544?pwd=NTFQd2ZqUkVNTnM4MUR2TXF4dzFZQT09>).

## Agenda:

1. Life updates
2. Timeline for this semester and expectations
   1. Tasks
   2. Biweekly meetings (15 minute stand-up meeting on Monday at 7:15 PM)
3. Basic QGAN Tasks: (I think we should try and implement it in Qiskit)
   1. Generator Architecture/Implementation
      1. Includes cost function (work with Ansatz person)
   2. Discriminator Architecture/Implementation
      1. Includes cost function (work with Ansatz person)
   3. Training
      1. Cost Functions (two people)
         1. Both discriminator and generator cost functions
      2. Classical Optimization Routine and Training Heuristics (see Figure 3 of <https://arxiv.org/pdf/1804.08641.pdf>). Will have to work with the cost functions of generator and discriminator. Research classical GAN training.
      3. Ansatz: work with generator and discriminator architecture people. Responsible for writing initialization routines for the disc/gen weights. The ansatz for this QGAN will be relatively simple, a primary goal of this role is to understand the function of an Ansatz and how this simple one can be extended (it explains in the paper). Will have to make sure the ansatz is compatible with the training routine (work together on that).
4. Brief winter kickoff presentation planning.