#### 11/9/2018

- 1. Change double to float
- 2. Comment out some lines in draws
- a. Comment out is marked by "//Comment out" following by /\*
- 3. Code change in update()

Why would you use 3 whiles in update()??

- a. Remove 1 while. Intend to remove 1 more.
- 4. Code change in draw
- a. Remove 1 the last for loop. Increase by 10ms.

Total time increase: 10 ms

#### 11/13/2018

-ParticleEmitter.cpp

- 1. Major break through in draw and update: remove STL list. 6 hours long, not worth it.
- 2. Also move some codes out of loops in draw.
- 3. Modify spawnparticle function so it does not have to use if-else condition in while
- 4. Remove buffer related thing

Side note: matrix multiplication probably causes none-improved timing. SIMD might help.

Time improve: none or very little.

### Particle.cpp

1. Remove unnecessary Vect declaration in Update

# main.cpp

1. Move camera out of loop

## 11/14/2018

- 1. Fixed particle size issue by re-do the whole project.
- 2. Add align16 header to solution
- 3. Use SIMD.
- 4. Try multiple methods of matrix multiplcation. Result remains unchanged. Hence there is "changed nothing" comment.
- 5. Move more code outside of loop.