Log Report

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I’ll start off by saying HOLY SHIT WHAT A NIGHT. I know you wanted this to be worked on for a while, but I wasn’t able to get my head in the game properly for most of it, then I got sick. Fun times, but I’m glad I was able to get this in!

11/9 – 122472

* First Pass
  + First look and brainstorming
  + Minor changes
  + No speed increase

11/18 – 124503

* Work begins
  + Started writing paper
  + Working through first steps
  + Tinkering with storage
  + Watching the system work
  + No speed increase

11/18 – 124589

* Changed all mention of double to float
  + All data is now a float if it was a double
  + All functions that were doubles are floats
  + Minor increase in speed. Maybe 1ms (in Debug w/ GUI)

11/19 – 124658

* Transferred Particle data into a Particle + ColdParticle list
  + Less used data was stored in cold while major variables were in Particle
    - EX: Life was stored in particle
  + Updated entire program to work with new node list structure
  + Slight increase in speed. ~3-5ms (in Debug w/ GUI)

11/19 – 124666

* Iterator removed. Replaced with new Hot/cold list
  + Curr\_Row, Diff\_Row and the like were all removed. They are redundant and slowed the code.
* ScaleMatrix is always 0, ignore those calculations.
* Cleaned up cold node to not have the above variables.
* Total speed is now 2x from the original (in release w/o GUI)

11/19 – 124670

* Removed Buffer List generation.
* 3-5ms faster (debug)

11/19 – 124679

* Cleaned up some buffer list loops I missed earlier
* ~1-2ms faster (debug w/ GUI)

11/19 – 124708

* Added RVO
* Added SIMD
* Removed some variables from the ParticleEmitter constructor.
* This addition was MASSIVE
* 5x total speed increase in release (w/o GUI)

11/19 – 124711

* Small changes
* PDF update
* Starting Log report

11/19 – 124712

* Accidentally only submitted the PDF.

11/19 – Whatever number is last

* Log Report submitted
* Analysis Submitted

11/19 – Whatever is after that one

* PDF updated with log and analysis

11/19 – Ok but totally the last one

* Fixed leaks causing debug and release to break at the end of a particle cycle.
* Fixed GUI display. Now prints correctly.