

## **Christoph Keller (i7802247, MADE0910) – Personal Inquiry - Talk Notes**

### **Particle systems referenced to identify common and necessary features:**

Trapcode Particular for Adobe After Effects

CC Particle World for Adobe After Effects

Houdini POP network

### **Announcement for Trapcode's Particular plugin for Nuke:**

Montgomery, J., 2010. NAB 2010 Roundtable. Podcast. Available from: <http://media.fxguide.com/fxpodcast/fxg-100416-NAB-roundtable.mp3> [Accessed 27 April 2010].

### **Production example for Nuke particles from District 9:**

Montgomery, J., 2010. fxguidetv #071. Online Video. <http://media.fxguide.com/fxguidetv/fxguidetv-ep071.mov> [Accessed 29 April 2010].

### **Existing particle approaches for Nuke:**

Creative Crash. Available from: <http://www.creativecrash.com/> [Accessed 27 April 2010].

### **Programming reference:**

The Foundry Nuke X User Guide, Python Documentation, TCL Documentation

### **Theoretical background of particle systems:**

Reeves, W. T., 1983. Particle Systems – A Technique for Modeling a Class of Fuzzy Objects. ACM Transactions on Graphics, 2 (2), 91-108.

Martin, A. Particle Systems. Available from: <http://web.cs.wpi.edu/~matt/courses/cs563/talks/psys.html> [Accessed 02 April 2010].

Owen, G., 2000. Particle Systems. Available from: <http://www.siggraph.org/education/materials/HyperGraph/animation/particle.htm> [Accessed 02 April 2010].

### **Particle implementation basics:**

Bourke, P., 1998. Particle System Example. Available from: <http://local.wasp.uwa.edu.au/~pbourke/miscellaneous/particle/> [Accessed 02 April 2010].

Cornejo, A., 2009. particle system. Available from: <http://people.csail.mit.edu/acornejo/html/particle.htm> [Accessed 02 April 2010].

Hammersley, T., 2004. Particle Systems. Available from: [http://www.devmaster.net/articles/particle\\_systems](http://www.devmaster.net/articles/particle_systems) [Accessed 02 April 2010].

Anonymous. Tutorial 8 - Particle System. Available from: <http://www.naturewizard.com/tutorial08.html> [Accessed 02 April 2010].

### **Advanced particle implementations:**

Latta, L., 2004. Building a Million Particle System. Game Developers Conference 2004.

### **Recap of the concepts behind linear compositing and premultiplication:**

Brinkmann, R., 2008. The Art and Science of Digital Compositing. 2nd ed. Burlington : Morgan Kaufmann.

### **Math and physics reference:**

Papula, L., 2003. Mathematische Formelsammlung/ 8<sup>th</sup> ed. Wiesbaden : Vieweg Verlag.

### **General information and forum for feedback:**

fxguide. Available from: <http://www.fxguide.com/> [Accessed 29 April 2010].

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+ intrinsic knowledge from prior experience as a real-time graphics programmer