

Array of Talks: Computer Animation Research at UCSB

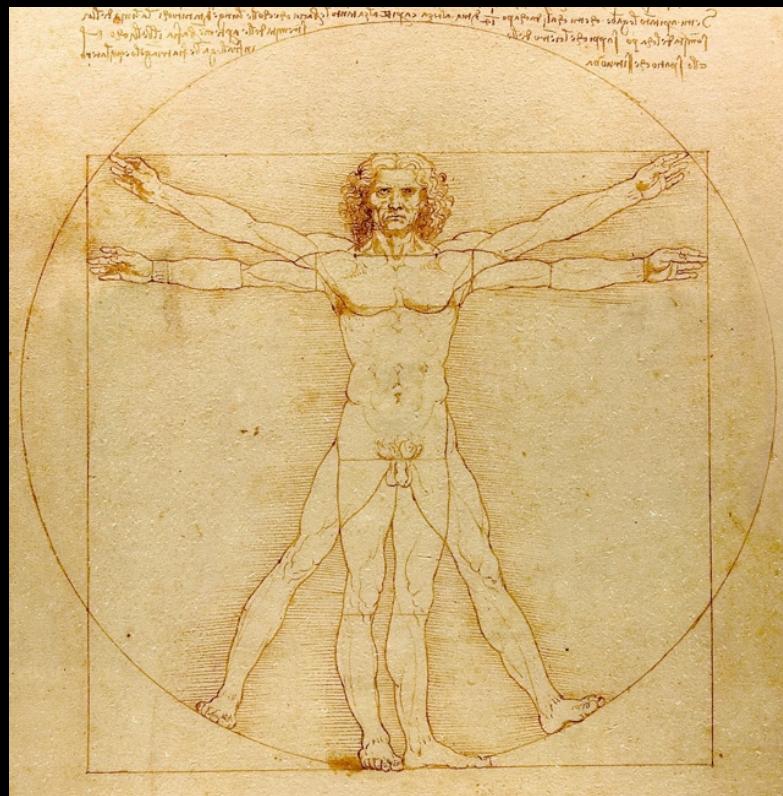
Theodore Kim
Media Arts and Technology
University of California, Santa Barbara

About Me

- *Cornell University*, B.S. (2001)
- *UNC Chapel Hill*, M.S. (2003) and Ph.D. (2006)
- *IBM TJ Watson, Cornell University*, Post-Doc
- All previous in Computer Science
- Joined UCSB MAT in Fall 2011
- Working with Dr. Pradeep Sen (ECE) to build a great graphics program here

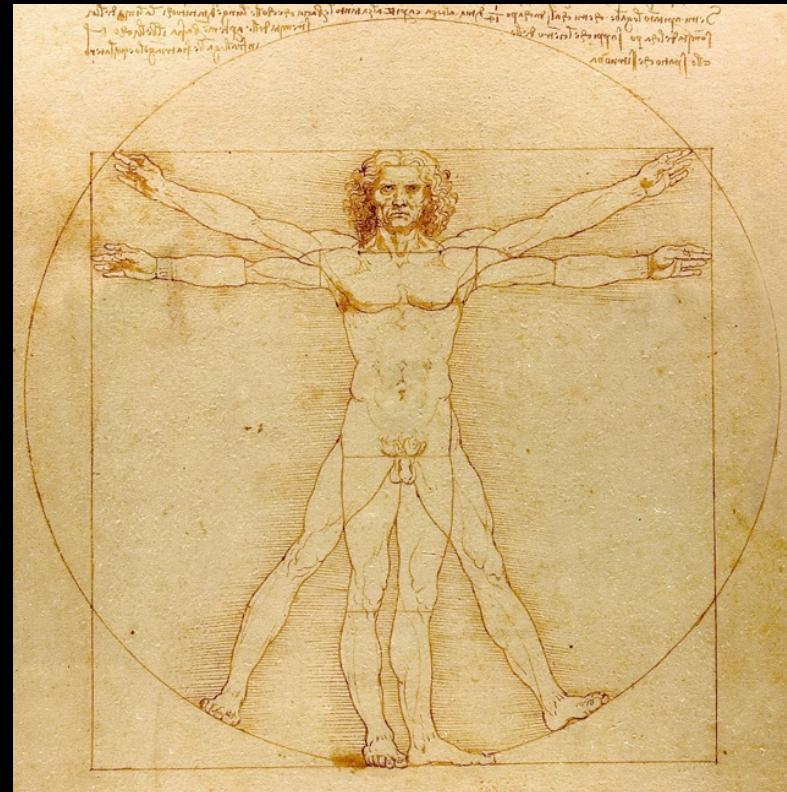
My Research

- Simulation of *natural motion*



My Research

- Simulation of *natural motion*





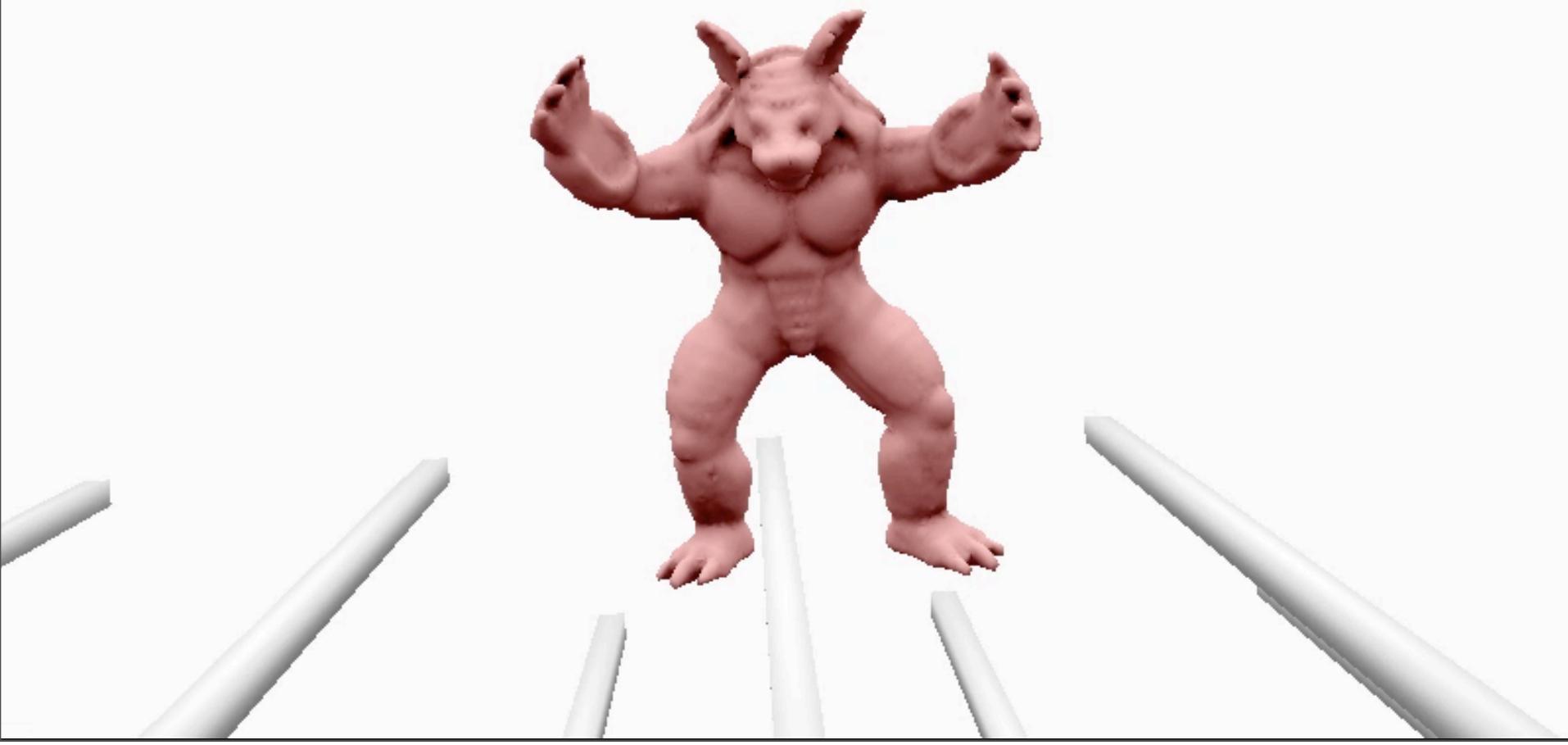
Full Simulation



Online Reduced
Simulation (56x faster)





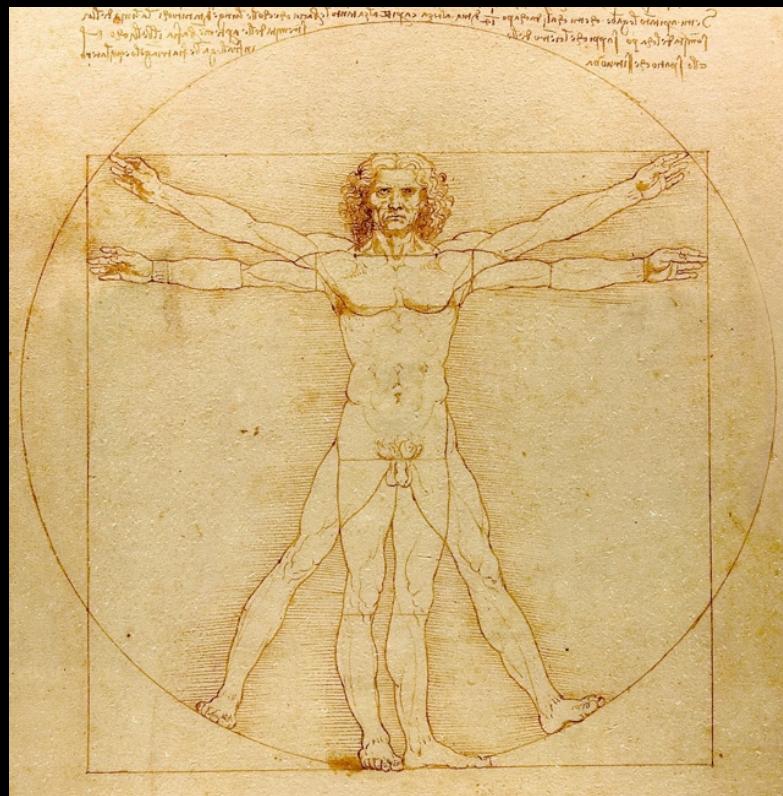


Wednesday, October 31, 2012



My Research

- Simulation of *natural motion*



My Research

- Simulation of *natural motion*

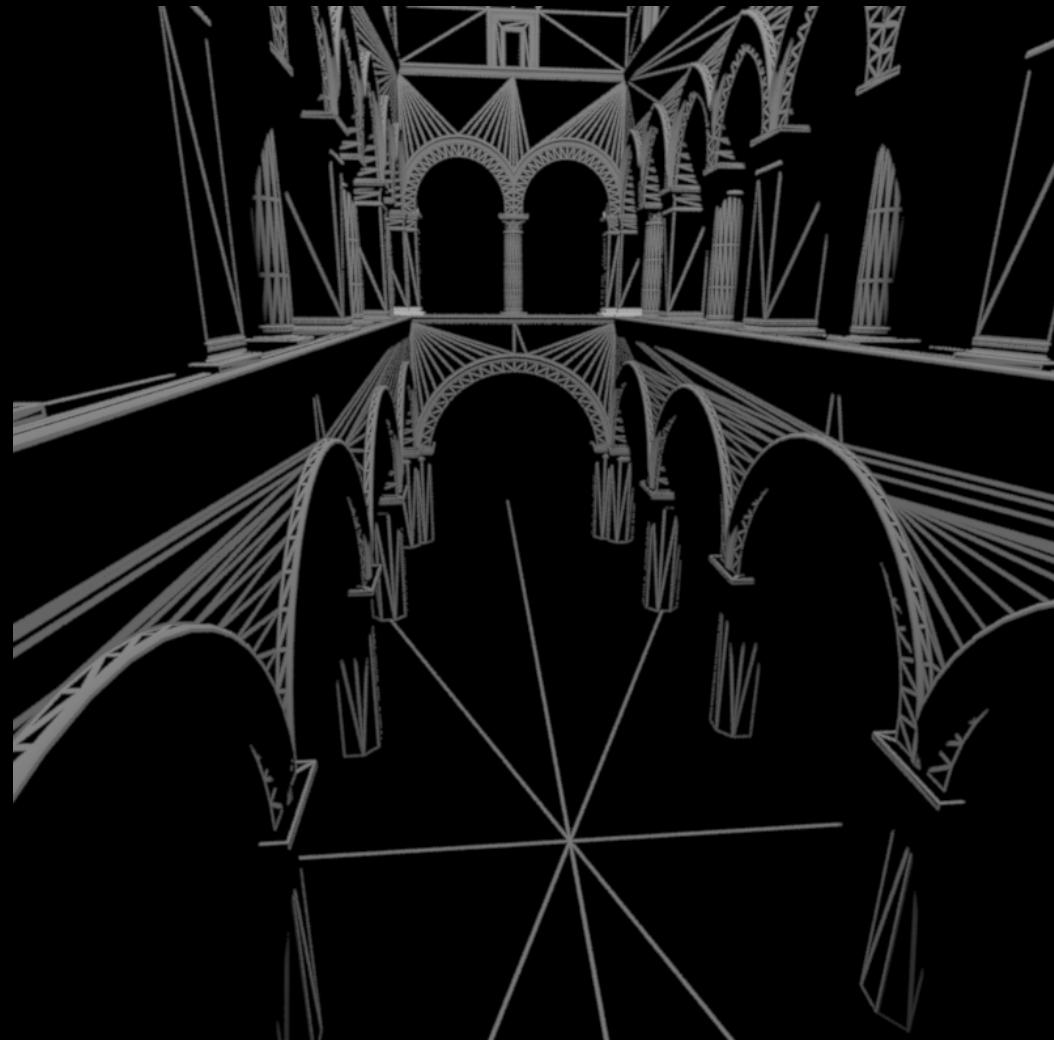


My Research

- Simulation of *natural motion*



An “Upres” Workflow



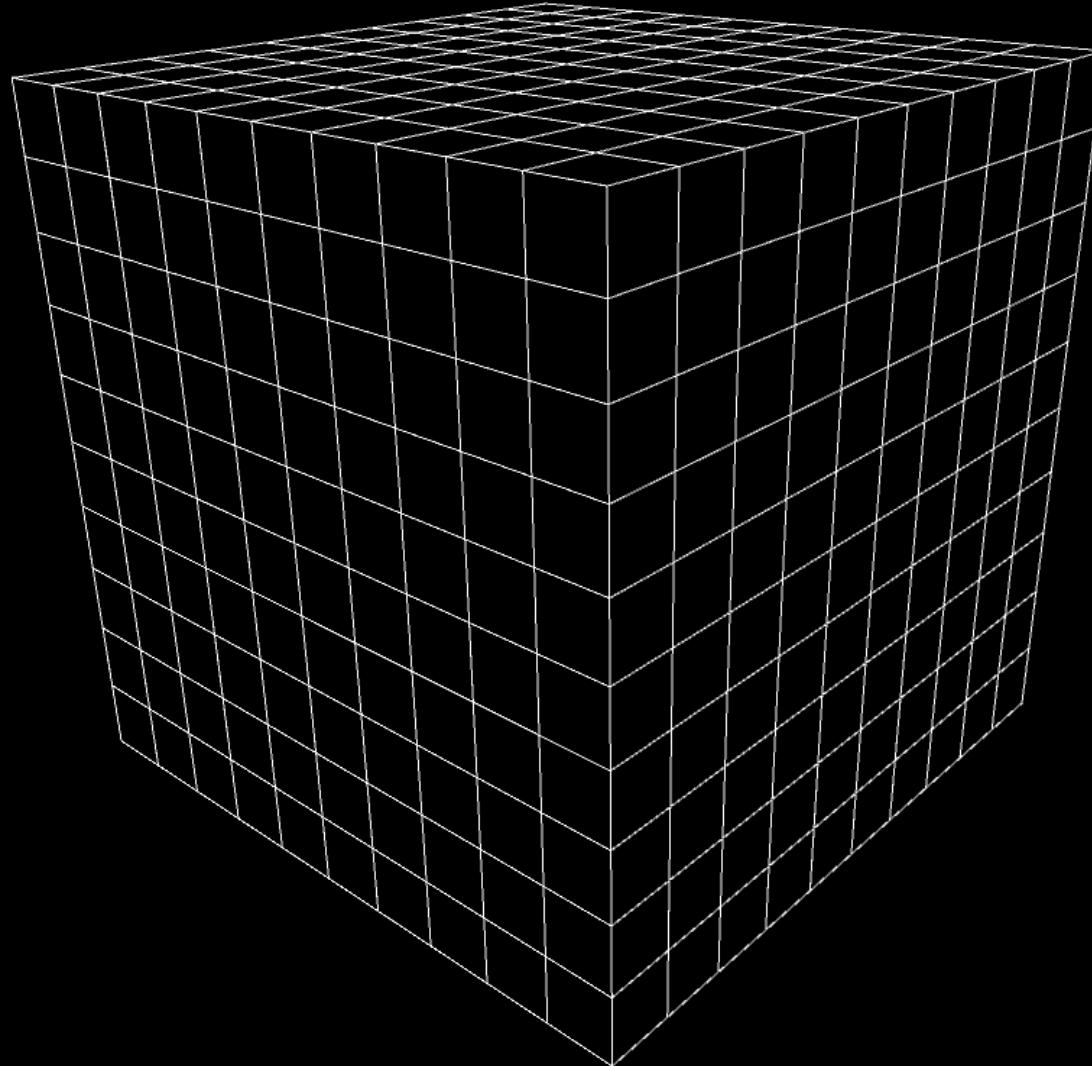
An “Upres” Workflow



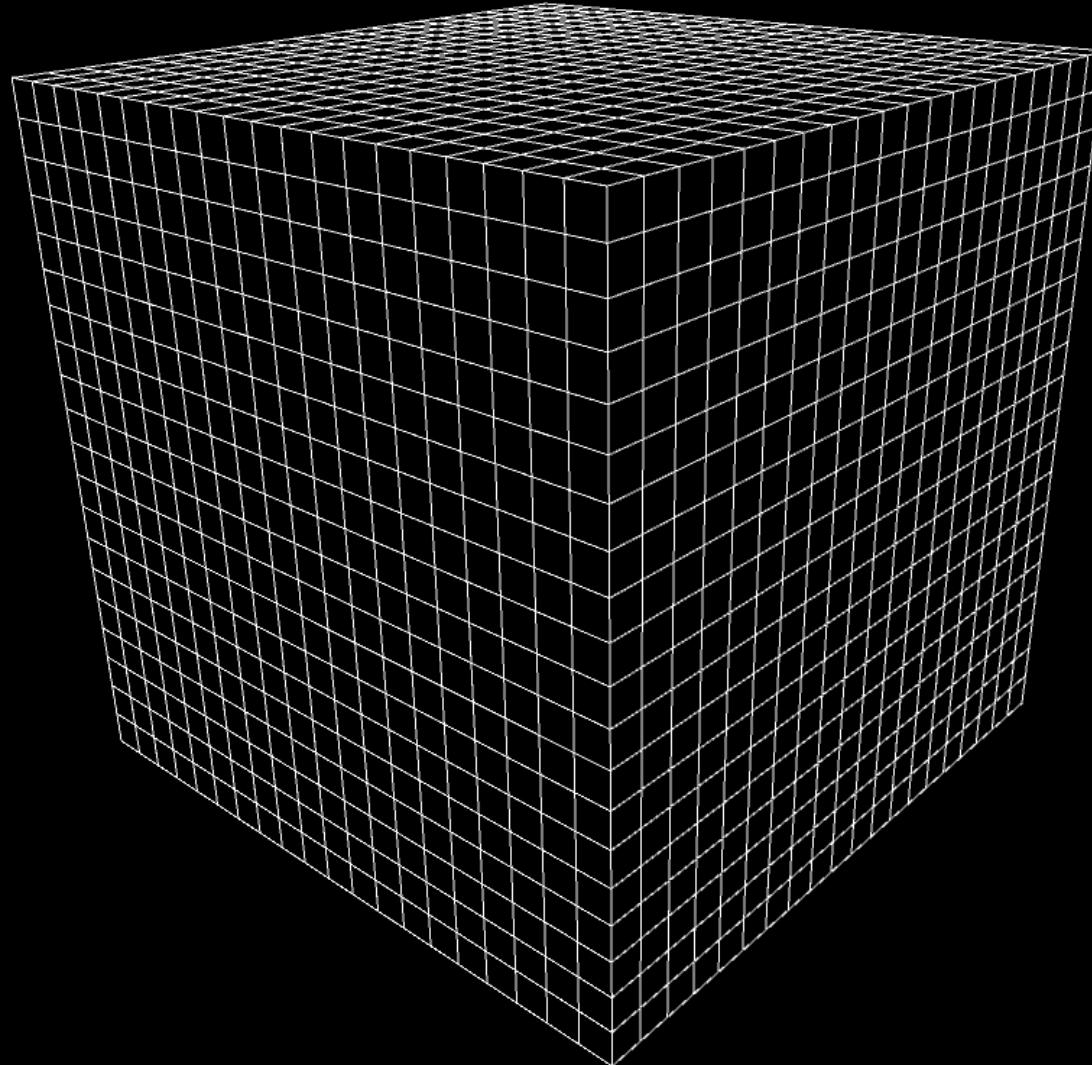
An “Upres” Workflow



Can We “Upres” Fluids?



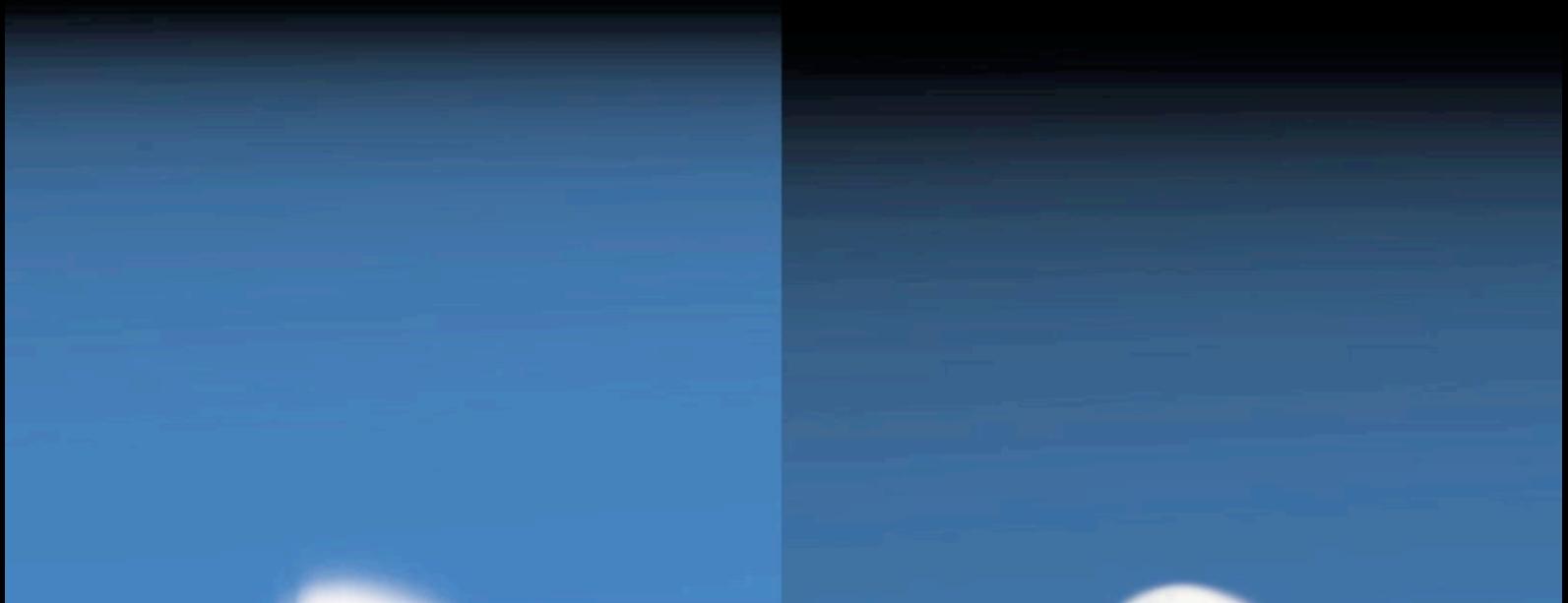
Can We “Upres” Fluids?



Can We “Upres” Fluids?

1x

4x



Wavelet Turbulence

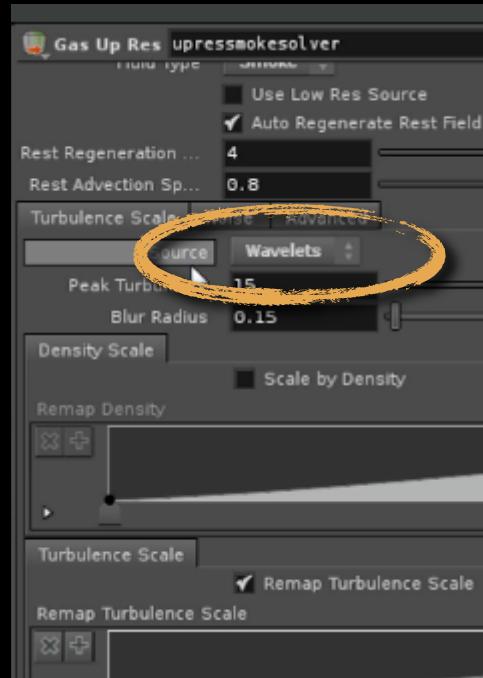
1x

Ours

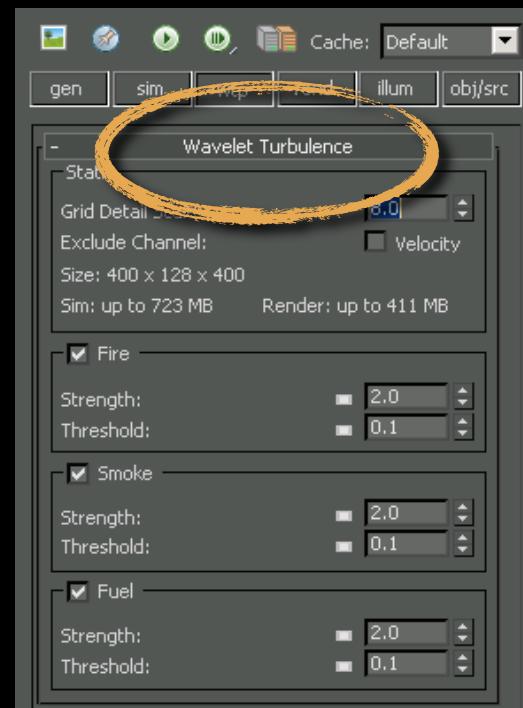
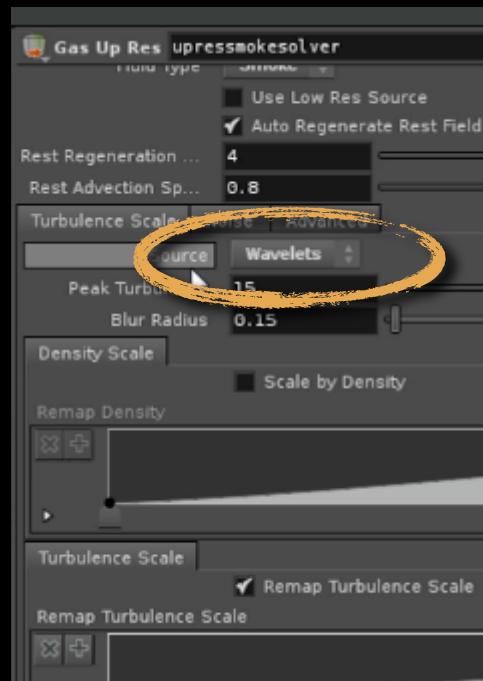


Implementations

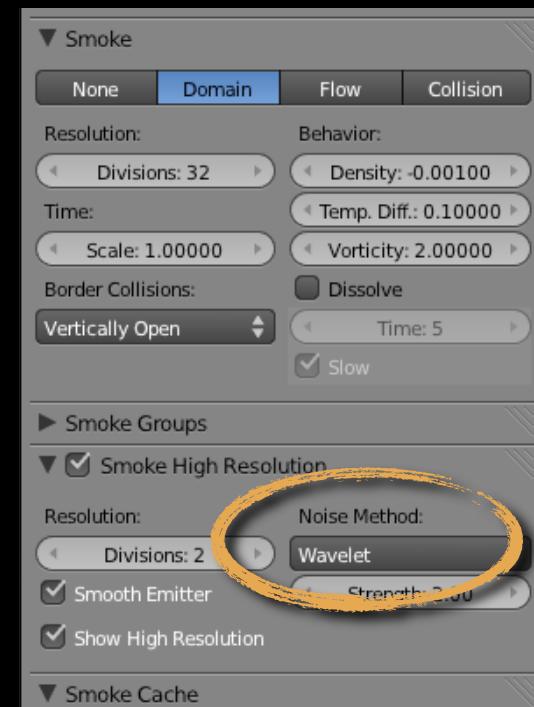
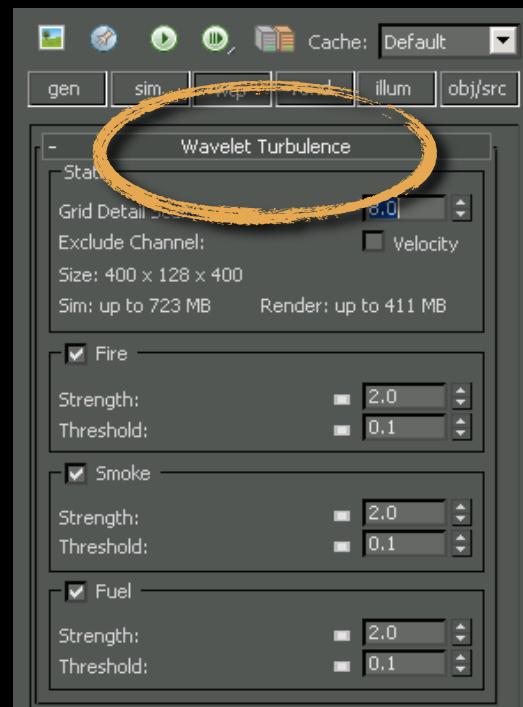
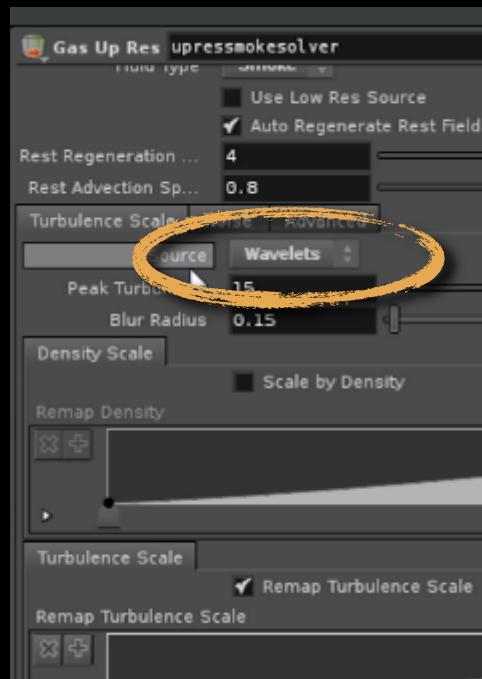
Implementations

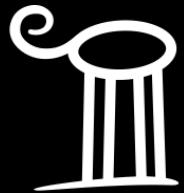


Implementations



Implementations





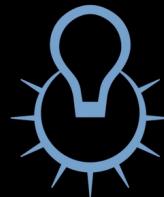
ANIMALLOGIC



DIGITAL DOMAIN



SCANLINE VFX



INDUSTRIAL
LIGHT & MAGIC

A LUCASFILM COMPANY

weta
DIGITAL

Thank you