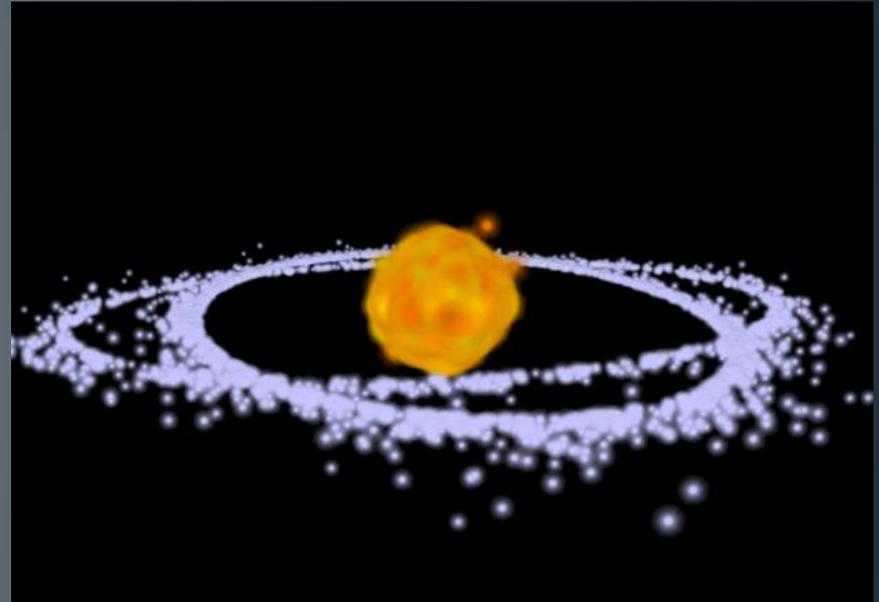


Introduction

- Martin Šik
- Masters student at Faculty of Mathematics and Physics of Charles University
- Study Program: Computer Science
- Focus: Computer Graphics

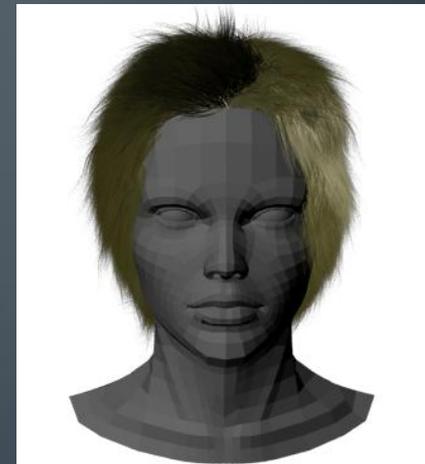
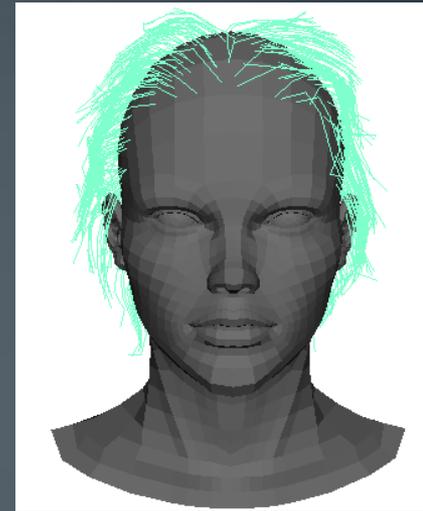
Particle Systems

- Bachelor thesis
- Simulation of natural phenomena in CG: fire, liquids, clouds, explosions etc.
- Fast Interaction between particles
- Off-line/On-line simulation



Stubble Software Project

- Hair modeling
- Autodesk Maya
- Automatic hair generation
- RenderMan, mentalray

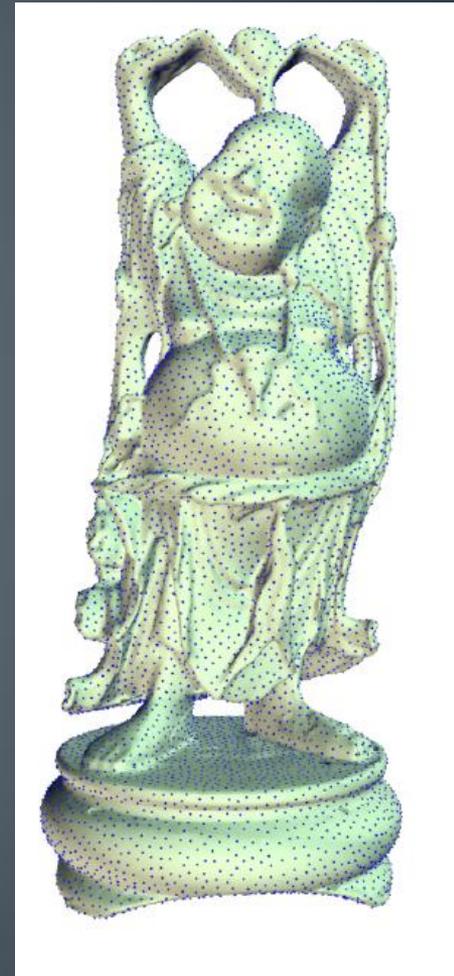


Hair generated by Stubble



Current Research: Mesh Sampling

- Random hair roots placement
- Rendering
- Many more applications in computer graphics..



New Mesh Sampling Algorithm

- Samples density defined by texture
- Up to 33 times faster than existing techniques
- CESC G 2012 paper
- Further improvements, cooperation with Jaroslav Křivánek
- Goal: EGSR 2012

Results

