More on 3D scene

- Animation
- Interaction
- Complex shape modeling
- Complex material modeling
- More on lights
- More on cameras

Animation

- Introducing time component

- Types:
  - Environment: phenomena and effects
  - Character: face and body animation

- Approaches:
  - Manual
  - Procedural
    - Phenomenological models
    - Physics simulation

Animation tools

- Particles

- Meshs : deformation of vertices

  - Blending and morphing (RTR 4.4, 4.5)

- Voxels

- Splines

- Interpolation

Manual animation

Procedural animation

- Physics:
  - Fluid simulation
  - Static body and collision
  - Rigid body and collision
  - Kinematics and inverse kinematics
  - Cloth, hair

Interaction

- HCl

Complex shape modeling

- Alternative shape representations
- Procedural approaches (noise)
- Scanning, photogrammertry, measuring

Complex material modeling

- Physically based scattering functions
- PBR textures

More on lights

- Environment: sun and sky
- Area lights and shadow
- Light distributions

More on cameras

- DOF and lenses
- Camera effects
- Motion blur
- exposure