

# GPU PIPELINE - FRAGMENT SHADER

- Input: 1 Fragment
- Output: 0 or 1 Fragment
- Fragment shader is executed exactly one **for each** fragment regardless whether it will end up on the screen or not\*
- Fragments have a screen position and depth information + other predefined attributes + user-defined attributes
- Fragments can be **discarded**
- Sample usage:
  - Per-pixel lighting
  - Volume rendering
  - Texturing
  - ...

# GPU PIPELINE - PER-FRAGMENT OPERATIONS

- Fixed pipeline
- Can discard or merge fragments
- Assembling multiple fragments (*MSAA*, Multi-sampling antialiasing)
- Depth Buffer Test
  - Result depending on `GL_DEPTH_TEST` and `glDepthFunc`
- Blending
  - Result depending on `GL_BLEND` and `glBlendFunc`
- ...