What are they?

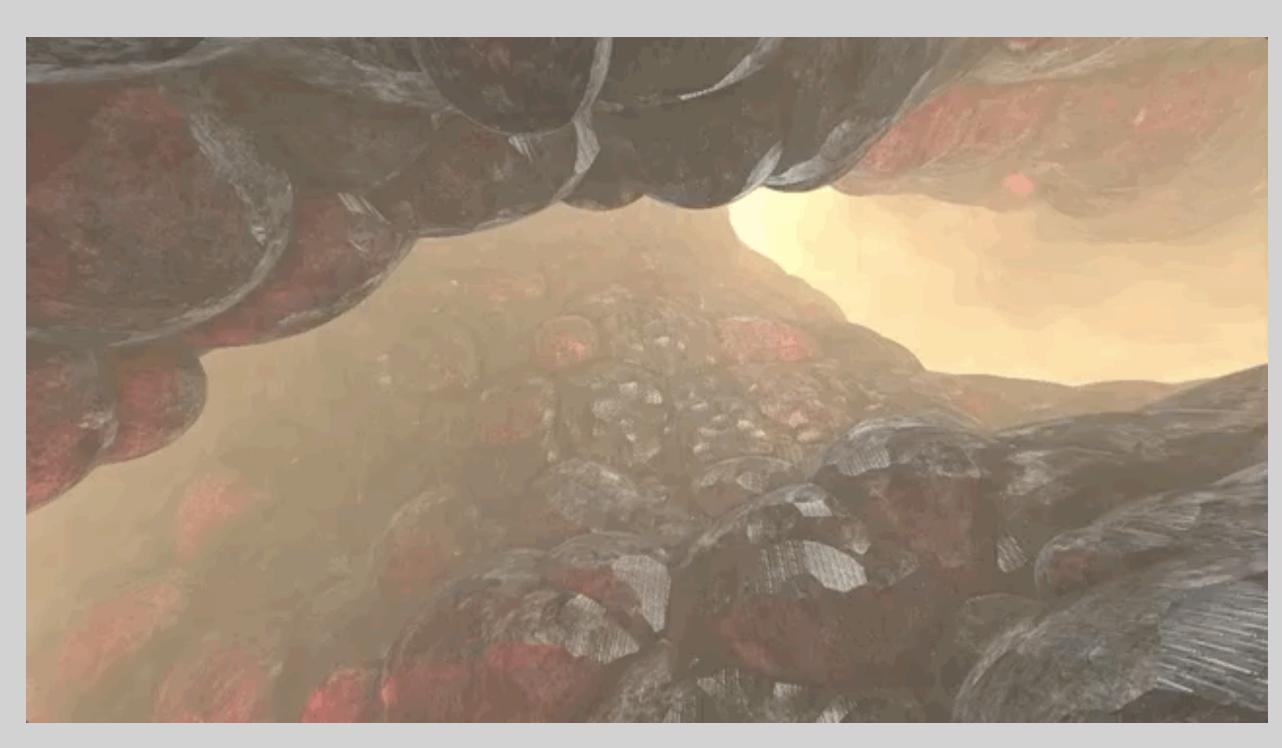
- programs mapping a pixel's position to a color they run per pixel on the screen, in parallel they only have info about "the current" pixel and its position cant access neighboring pixels





What are they?

- programs mapping a pixel's position to a color
- they run per pixel on the screen, in parallel
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- cant access neighboring pixels



3D Cellular Tiling Created by Shane in 2016-04-17

```
    Shader Inputs

                       iResolution;
                                                // viewport resolution (in pixels)
   uniform vec3
                      iTime;
                                                 // shader playback time (in seconds)
   uniform float
   uniform float
                      iTimeDelta;
                                                // render time (in seconds)
   uniform int
                                                // shader playback frame
                                                // channel playback time (in seconds)
   uniform float
                      iChannelTime[4];
                      iChannelResolution[4]; // channel resolution (in pixels)
   uniform vec3
                                                 // mouse pixel coords. xy: current (if MLB down), zw: click
   uniform vec4
                      iMouse;
   uniform samplerXX iChannel0..3;
                                                // input channel. XX = 2D/Cube
                                               // (year, month, day, time in seconds)
// sound sample rate (i.e., 44100)
  uniform vec4
                      iDate;
   uniform float
                      iSampleRate;
586
                  float tanHi = abs(mod(per*.5 + t + iTime, per) - per*.5);
587
                  vec3 tanHiCol = vec3(0, .2, 1)*(1./tanHi*.2);
588
                  sceneCol += tanHiCol;
589
590
591
                  //vec3 refCol = vec3(.5, .7, 1)*smoothstep(.2, 1., noise3D((sp + ref*2.)*2.)*.66 + nois
//sceneCol += refCol*.5;
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596
                  // Shading.
                  sceneCol *= atten*shading*ao;
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                  //sceneCol = vec3(ao);
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            // Blend the scene and the background with some very basic, 4-layered fog.
float mist = getMist(camPos, rd, light_pos, t);
vec3 sky = vec3(2.5, 1.75, .875)* mix(1., .72, mist)*(rd.y*.25 + 1.);
sceneCol = mix(sceneCol, sky, min(pow(t, 1.5)*.25/FAR, 1.));
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            // Clamp, perform rough gamma correction, then present the pixel to the screen.
fragColor = vec4(sqrt(clamp(sceneCol, 0., 1.)), 1.0);
609
610
611
612 }
```