Miguel_s_Present

```
import ddf.minim.*;
import ddf.minim.analysis.*;

Minim minim;
AudioPlayer song;
FFT fft;
BeatDetect beat;

int eX = 10;
int eY = 10;
boolean mute = false;
color color_1 = #ECD078; //#013f2f; //#e65a90; //#78d8a9;
color color_2 = #C02942; //#cb07e7; //#62519b; //#d698fd;
color color_3 = #542437;
color color_4 = #53777A;

int eRadius = 10;

int bpm = 101;

float r;
float theta;
float a = 3;
float b = 5;
float aDif = 0.1;

boolean playing;

void setup() {

 //size( 800, 800);
 size( 23811, 23811);
```

```
minim = new Minim(this);
//buffer size 1024
song = minim.loadFile("Soda Stereo - Persiana Americana.mp3");
song.play();
song.loop(1);
playing = true;
fft = new FFT( song.bufferSize(), song.sampleRate() );

beat = new BeatDetect( song.bufferSize(), song.sampleRate() );
beat.setSensitivity(300);
beat.detectMode(BeatDetect.FREQ_ENERGY);

colorMode(HSB);

r= 0;
theta= 0;

background(5);
}

void draw(){
if(playing){
  if(song.loopCount() == 0 ){
    song.pause();
    saveFrame("###.png");
    playing = false;
  }

  float avg = 0;
  eRadius = width/80;

  fft.forward(song.mix);
  beat.detect(song.mix);
```

```
  stroke(255, 0, 0, 128);

  for(int i = 0; i < fft.specSize(); i++){
    avg += fft.getBand(i);
  }

  color c = lerpColor(color_1, color_3, avg/2500);

  if(beat.isKick()) eRadius = width/40;
  if(beat.isSnare()) eRadius = 3*width/160;

  noStroke();
  fill(c);
  drawInEspiral();
 }
}
void drawInEspiral(){
 translate(width/2 , height/2);

 theta += aDif;

 r = a+ b*theta;

 aDif = 1/r;

 float x = r*cos(theta);
 float y = r*sin(theta);

 ellipse(x, y, eRadius, eRadius);
}

void keyPressed(){
 if(!mute){
  song.mute();
```

```
  mute = true;
 }else {
  song.unmute();
  mute = false;
 }
 if(key==&apos;s&apos;){
  saveFrame("###.png");
 }
}
```