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


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

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 = width/80;

int bpm = 101;

float r;
float theta;
float a = 22.3;
float b = 37;
float aDif = 0.1;

boolean playing;

void setup() {

//size( 800, 800);
 size( 5953, 5953 );

 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 = 45/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=='s'){
   saveFrame("###.png");
 }
}
```