

```

(
//Skating Ice Rink Resonator -- SuperCollider Code
// jesse pearlman karlsberg 26, 27 january 2003

//echoing distorted ramp wave pulses

//i took figure skating lessons for a number of years as a child. i remember while skating we
//would listen to music played over loudspeakers mounted on the ceiling of the rink and that
//the sound would reverberate and echo off the walls and ice, creating a rhythmically complex
//and cacophonous sonic texture. this piece is designed with the resonance of an ice rink in
//mind. two expendable loudspeakers should be skated around the rink by interested onlookers
//for the duration of the installation, causing the pan and echo to shift.

//this patch applies a resonant low pass filter to a ramp wave tuned to a semi-random
//frequency which can be adjusted in the graphical user interface. the ramp wave is
//resonated at a similarly semi-randomly determined frequency and is emitted in short
//pulses of variable length. this signal is then run through a series of delay and
//dynamics filters, creating a modifiable dsitribution with characteristics described
//in the comments below. the result is a texture of changing irregular blips.
Items.funcInit({arg items, freq, rfceil, rq, dist, delay, decay, amp, scope = \ScopeV;
    items.name_("s. i. r. r. laptop patch");

    items.setItems(
        CR,
        freq          .freq(160)                                .name_("frequency "),
        rfceil        .freq(20000)                              .name_("res. freq."),
        rq             .sp(0.1, 0.0001, 1, 0, 'exponential')    .name_("bandwith  "),
        dist           .sp(10, 1, 100)                          .name_("distortion"),
        CR,
        delay          .sp(0.85, 0.05, 5)                       .name_("delay time"),
        decay          .sp(3.5, 0.2, 10)                        .name_("decay time"),
        amp            .amp(0.2)                                .name_("amplitude "),
        CR, scope
    );

```

```

items.sound_({var sfunc;

    sfunc =
        RLPF.ar(          //a resonant low pass filter
            Saw.ar(LFNoise1.ar(20, freq.kr * 0.85, freq.kr), dist.kr).distort, //input
            LFNoise0.ar(1, rfceil.kr * 0.75, rfceil.kr * 0.9), rq.kr,          //res freq,
bandwidth
            LFPulse.ar(1 + LFNoise0.ar(1, 0.9), 0.1)          //short pulses          //control
        );

    Scope.ar(
        scope.myView,
        Pan2.ar(
            CombN.ar(sfunc, 5, delay.kr, decay.kr)          //0.05-5s comb delay
            +
            (DelayN.ar(          //0-6s delay
                CombN.ar(sfunc, 0.05, 0.05, 1.2) * 0.1,    //0.05s comb delay
                6, LFNoise0.ar(4, 3, 3)
            )), 0, amp.kr          //amp
        )
    );
});
}).show
)

```