# Tidal

## 1 Tidal

Welcome to this workshop on tidal cycles, known as tidal for short.

Rough schedule for day one:

## 1.1 Morning

- Background to live coding
- Thinking about patterns
- Simple looping
- More complicated rhythms

#### 1.2 Afternoon

- Quipu?
- Transforming patterns

## 2 Looping sounds with TidalCycles

```
Using simple high (h) and low (1) drum sounds.

sound "h 1"

Add more sounds, and it'll squeeze them in to the same rhythmic 'cycle'
sound "h h h h l l l l l"

You can use ~ to add gaps to add rhythms:
sound "h ~ l ~ h l ~"

You can use * and a number to play a sound multiple times (in the time of one):
sound "h*2 ~ l ~ h l*4 ~"

The conga rhythm "Have you got a dog, great big dog."
sound "h*4 l h*2 l"

Another way to put multiple sounds inside one, with [ and ]:
sound "h [l l l]"
```

# 3 Changing the sounds with 'effects'

```
sound "h [1 h] h ~"
Reverse the loop
rev $ sound "h [l h l] h l"
Make it louder
louder $ sound "h [l h l] h l"
Make it quieter
quieter $ sound "h [l h l] h l"
Make it quiet!
mute $ sound "h [1 h 1] h 1"
Send it to the left
left $ sound "h [1 h 1] h 1"
Send it to the right
right $ sound "h [l h l] h l"
Make it higher pitched
higher $ sound "h [l h l] h l"
Make it lower pitched
lower $ sound "h [l h l] h l"
Make it sound 'scratchy'
scratch $ sound "h [l h l] h l"
```

## 4 Conditionals

```
Do something every given number of loops, for example every third loop: every 3 higher $ sound "h [1 h 1] h 1"

Do something.. sometimes!

sometimes scratch $ sound "h [1 h 1] h 1"
```