



# radio pulsars

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In this sound installation data from The European Pulsar Timing Array has been transformed into sound, and you can play with them using the MIDI controllers you find in the room. With the noobs, you can mix the sounds, and hear the stars as looking up into the night. You can also change their tempo, and make them spin faster or slower to find textures, colors, and new sounding star relations.

## INSTRUCTIONS

Enter the room and stand in front of a MIDI controller.

S starts a sound. M mutes the sound. The upper wheel changes the time relation of that sound, and the slide changes the volume.

Play with the stars! and read the text below to know more.



Neutron stars comprise one of the possible evolutionary endpoints of high mass stars. Once the core of the star has completely burned to iron, energy production stops and the core rapidly collapses, squeezing electrons and protons together to form neutrons and neutrinos. These stars are extreme objects that measure between 10 and 20 km across. They have densities of  $10^{17} \text{ kg/m}^3$ , meaning that a teaspoon of neutron star material would weigh around a billion tonnes.

We listen to the sky  
beating strongly  
throughout the night, and  
we see the gleaming  
shades of dense neutron  
stars. We become when  
they die, as we could not  
exist without these  
pulsating hearts.

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