

LA PERCEPCION DEL MOVIMIENTO

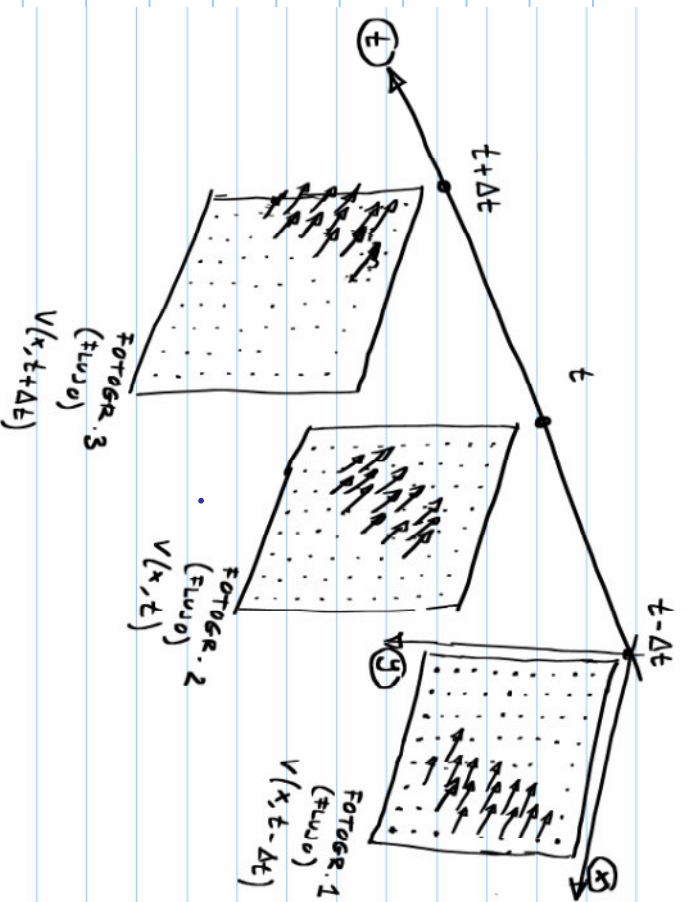
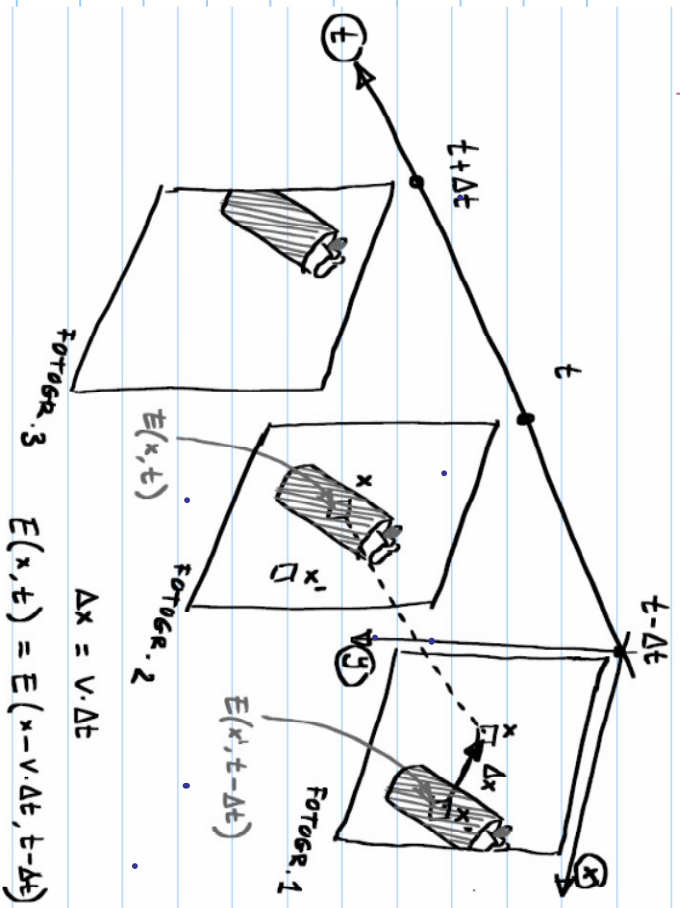
(50 uilisegundos)

JESÚS MALO & MANUEL SIMÓN

DPT. d'ÒPTICA

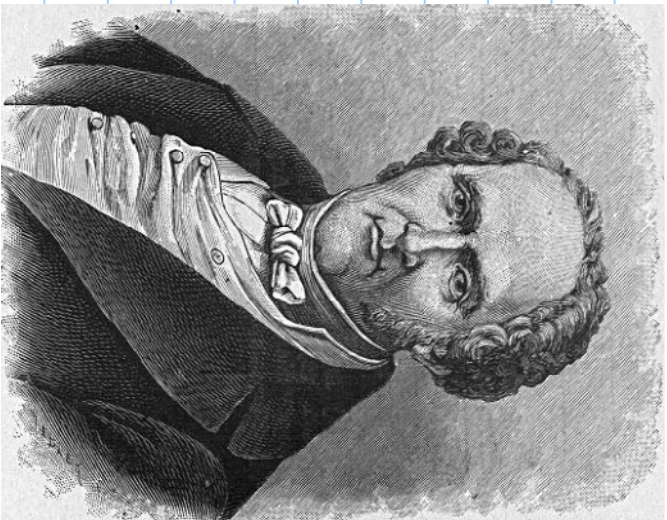
UNIVERSITAT DE VALÈNCIA

¿DE QUE VA LA CHARLA? : PELICULAS Y MOVIMIENTO



COLLABORADORES (I)

FOURIER



Charles

FOURIER

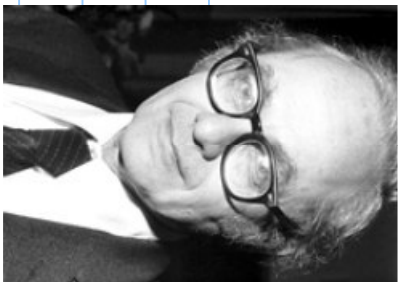


Jean Baptiste

COLLABORADORES (II)



FOURIER



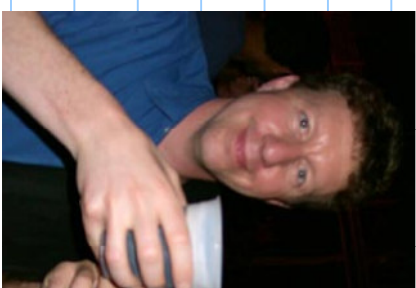
HUBEL
(Nobel Med.)



MORONE
(U. Pisa)



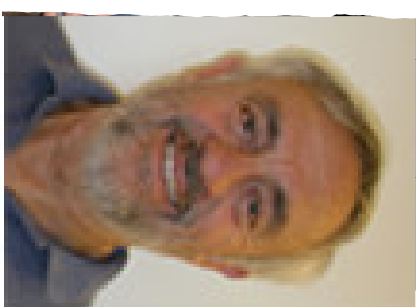
WIESEL
(Nobel Med.)



HEEGER
(NYU)



GABOR
(Nobel Fis.)



ATUMADA
(NASA)



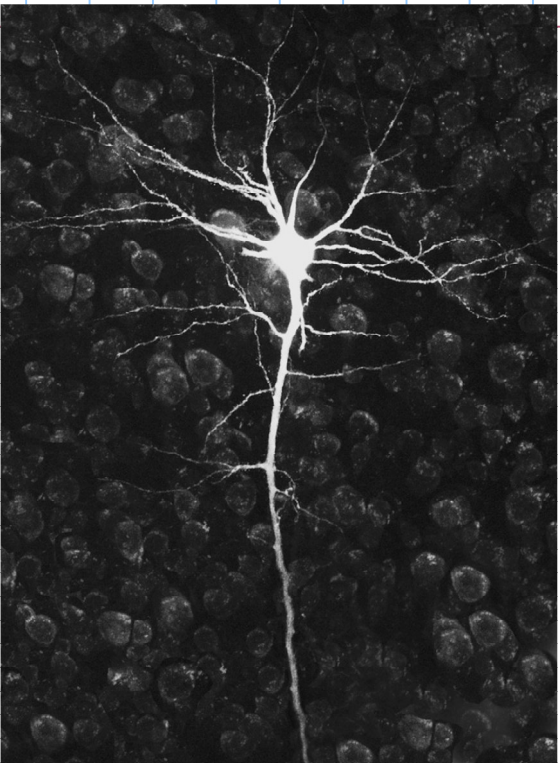
RHESUS
(mone)



WATSON
(NASA)

UNA NEURONA

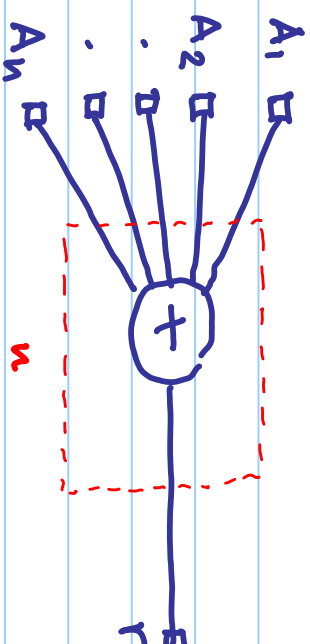
NEURONA REAL



RAMON Y CAJAL
(Nobel Med.)

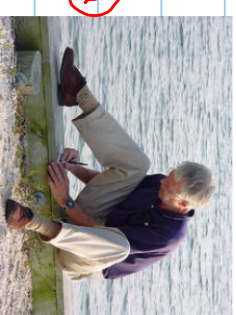


NEURONA ARTIFICIAL



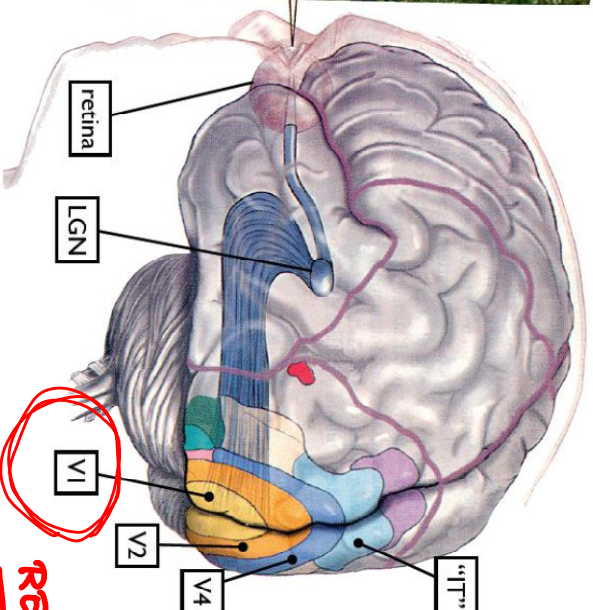
$$r = \sum_{i=1}^n g_i \cdot A_i$$

HOPFIELD
(U. Princeton)



MUCHAS NEURONAS (I)

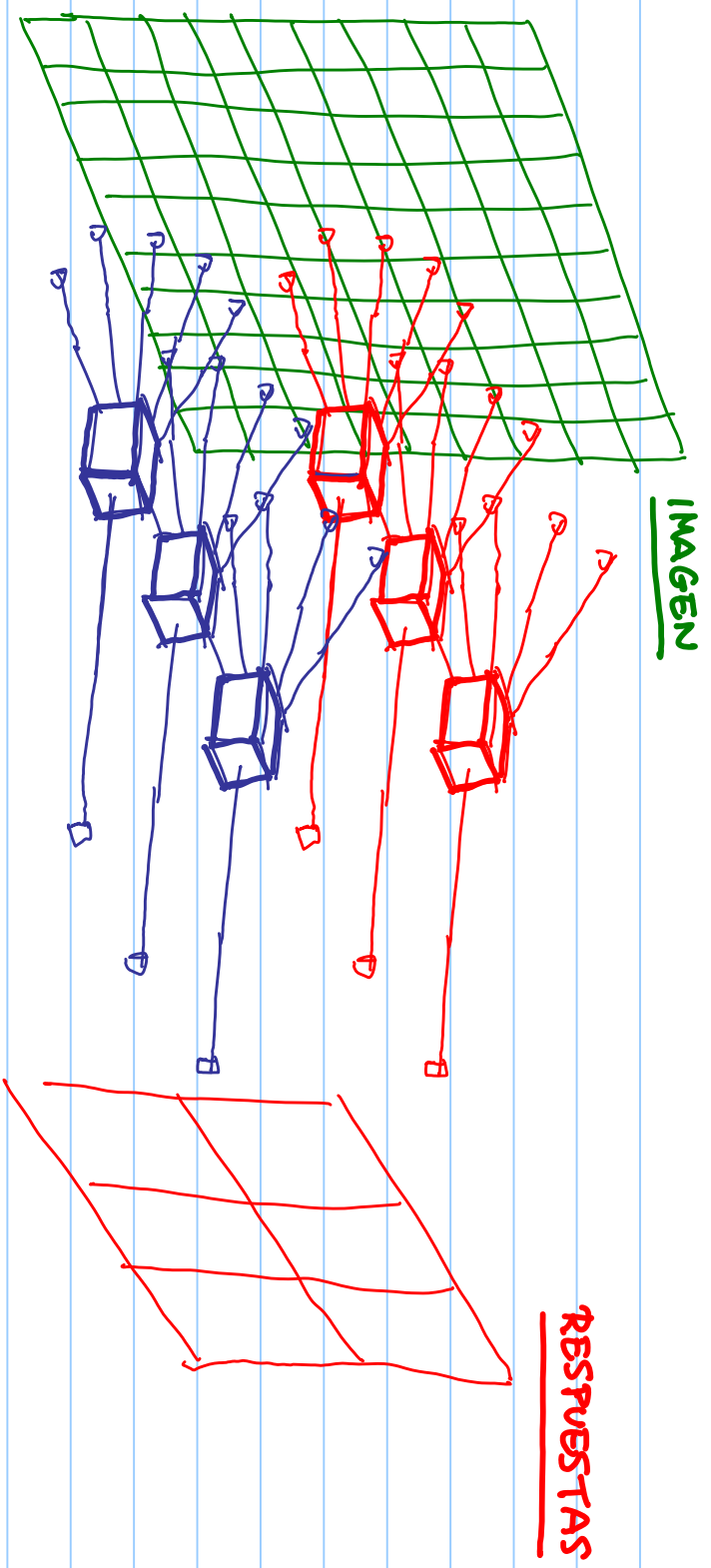
IMAGEN



RESPUESTA

MUCHAS NEURONAS (II)

6 NEURONAS



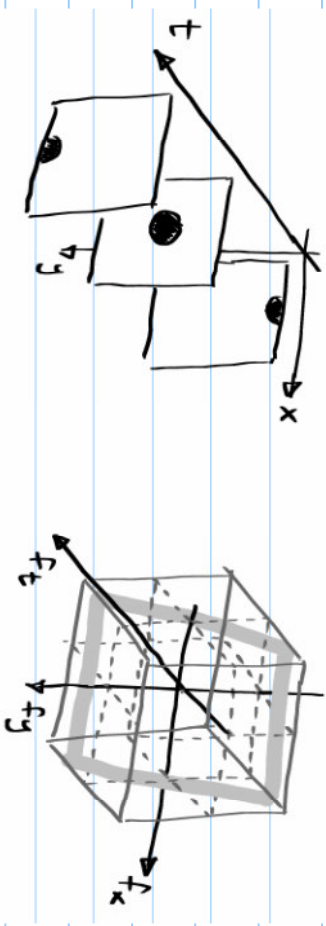
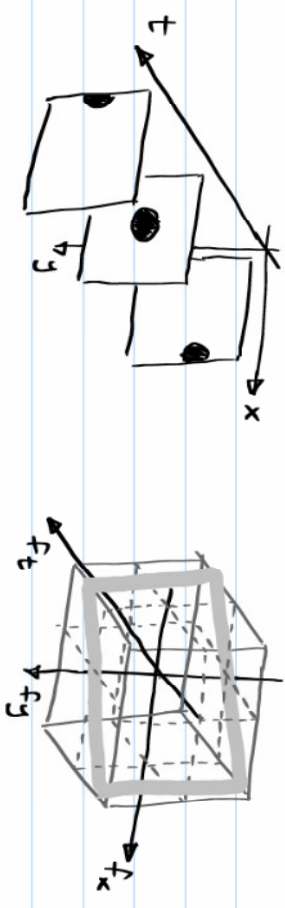
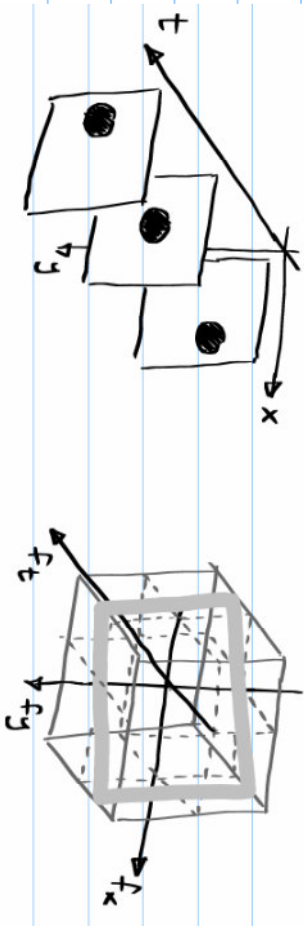
NEURONAS RESPONDIENDO A ESTÍMULOS (I): ESTÍMULO MUSICAL

- * Espectro

- * Neuronas como sensores frecuenciales

dspstfft_win32.m

ESTIMULOS VISUALES (I) : PELÍCULAS Y ESPECTROS



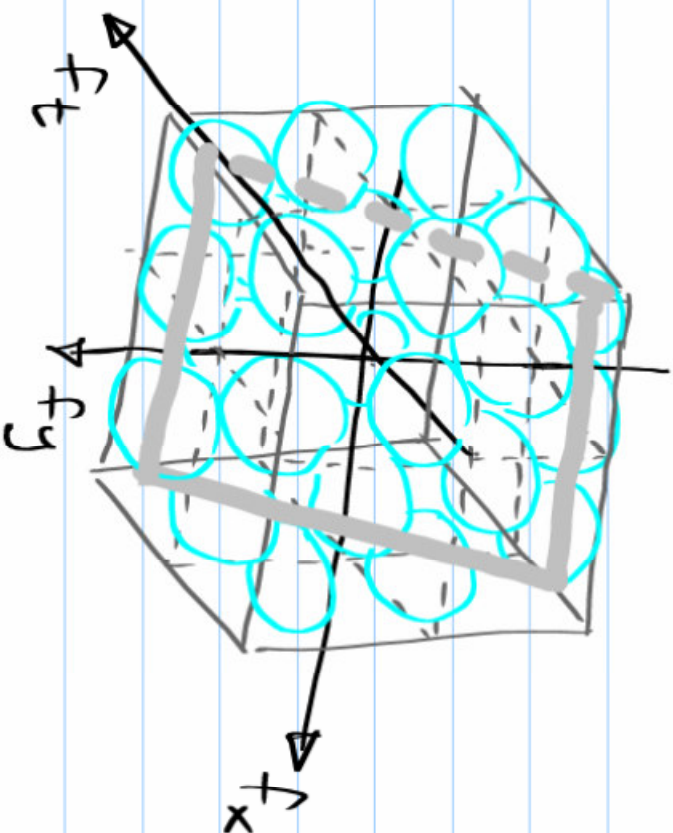
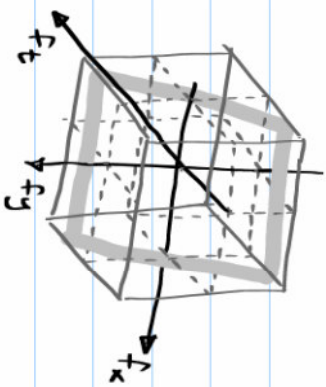
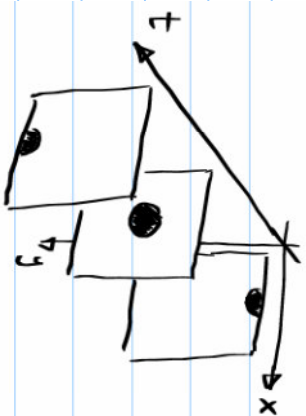
ESTIMULOS VISUALES (II) : UN CORTOMETRAJE Y SU ESPECTRO

EJECUTA EN MATLAB ESTE CÓDIGO :

corto_manos.m (the movie !)

espectro_corto.m (the spectrum !)

NEURONAS RESPONDIENDO A ESTIMULOS (II): BOLAS EN TU CABEZA



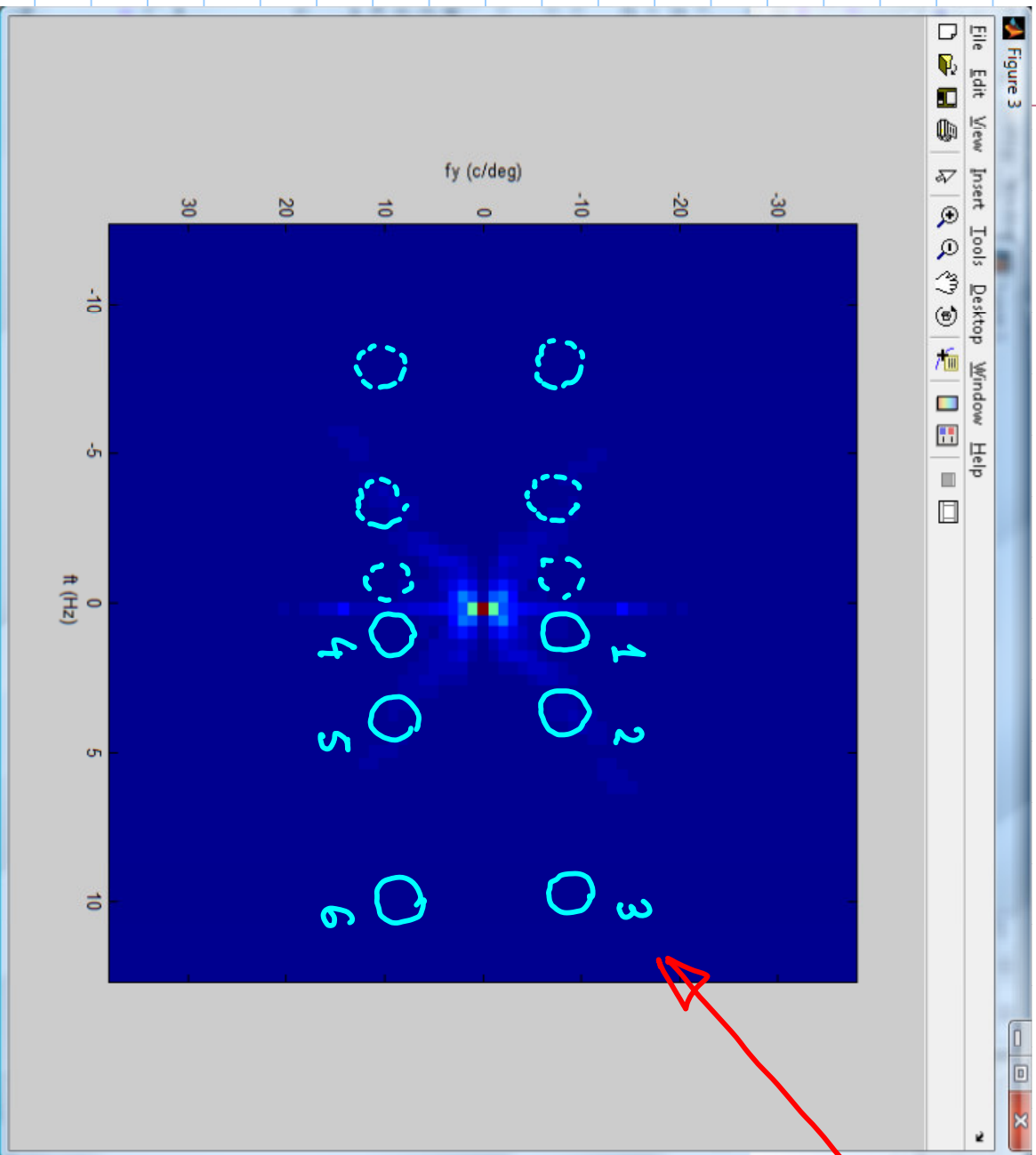
NEURONAS RESPONDIENDO A ESTIMULOS (III)

* Respuesta al corte en la región V1

respuesta_corte.u

* Velocidades percibidas

velocidades_percibidas.u



SENSORES

RESPOSTAS

	1	2	3
4	5	6	

resposta_corto.m

velocidades percibidas, m