**READ ME for the 4Data\_fit folder.**

1eps-alpha-lambda: Folder containing analysis scripts from main model comparison analysis (the ε-α-λ model vs the ε-α model vs the ε-λ model vs the ε model).

* 1\_2\_Human\_epsalphalambda\_epsalpha.py: fit of the ε-α-λ model and the ε-α model on human data
* 1\_2\_Pigeon\_epsalphalambda\_epsalpha.py: fit of the ε-α-λ model and the ε-α model on pigeon data
* 1\_2\_Rat\_epsalphalambda\_epsalpha.py: fit of the ε-α-λ model and the ε-α model on rat data
* 3\_Human\_epslambda.py: fit of the ε-λ model on human data
* 3\_Pigeon\_epslambda.py: fit of the ε-λ model on pigeon data
* 3\_Rat\_epslambda.py: fit of the ε-λ model on rat data
* 4\_Random\_model: fit of ε model on all data

2alternative\_lambda: Folder containing analysis scripts from model comparison analysis for “Alternative versions to implement the frequency-based memory”.

3HPC\_fit7models Folder containing analysis scripts from model comparison analysis for “Alternative memory-based mechanisms for adaptive variability”.

Extra-param\_corr.py Calculated the parameter correlations between the parameters estimated on the animal data. (The parameter correlations between the simulated estimated parameters are located in the plot ‘Param\_recov\_plot;py’ script in the folder ‘3Parameter\_recovery’.