

Report for diagnosing problems with HMC

January 5, 2020

The objective is to identify spatio-temporal seizure propagation patterns

Dataset

In order test the model, a synthetic dataset is generated using 5D Epileptor

Modeled data features

Given appropriate parameter values 2D Epileptor can capture some of the important characteristics of a seizure namely seizure onset and seizure length, which are sufficient for the purposes of identifying spatio-temporal seizure propagation patterns. Log. SEEG power encompasses both these features and hence forms a good candidate data feature that can be modeled using 2D Epileptor. See figure 2

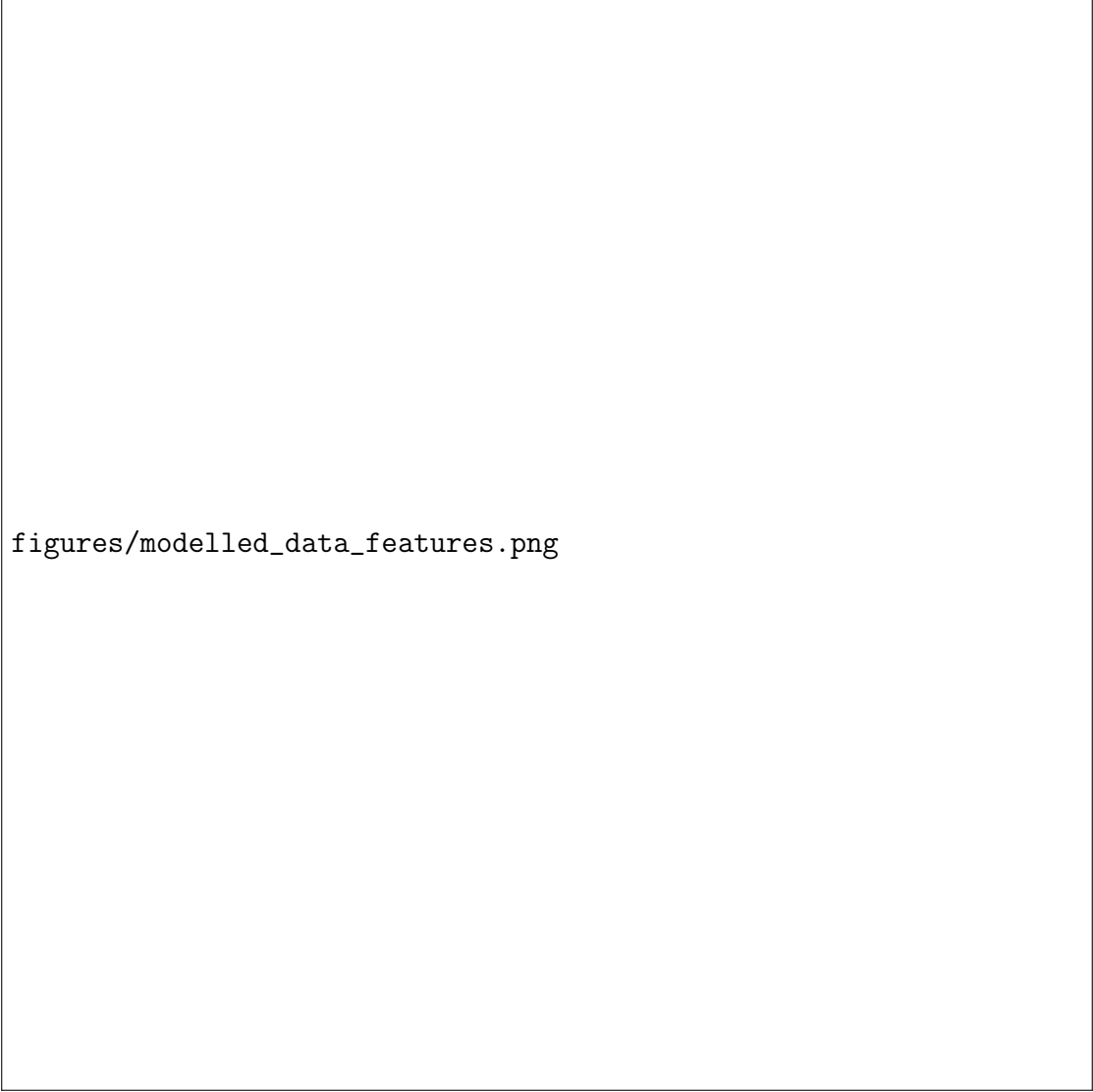
Model

Results

figures/source_activity_syn_data.png

(a) Source activity

figures/seeg_syn_data.png



figures/modelled_data_features.png

Figure 2: Modeled data features. SEEG log power of 10 sensors(left) and total power per sensor(right)

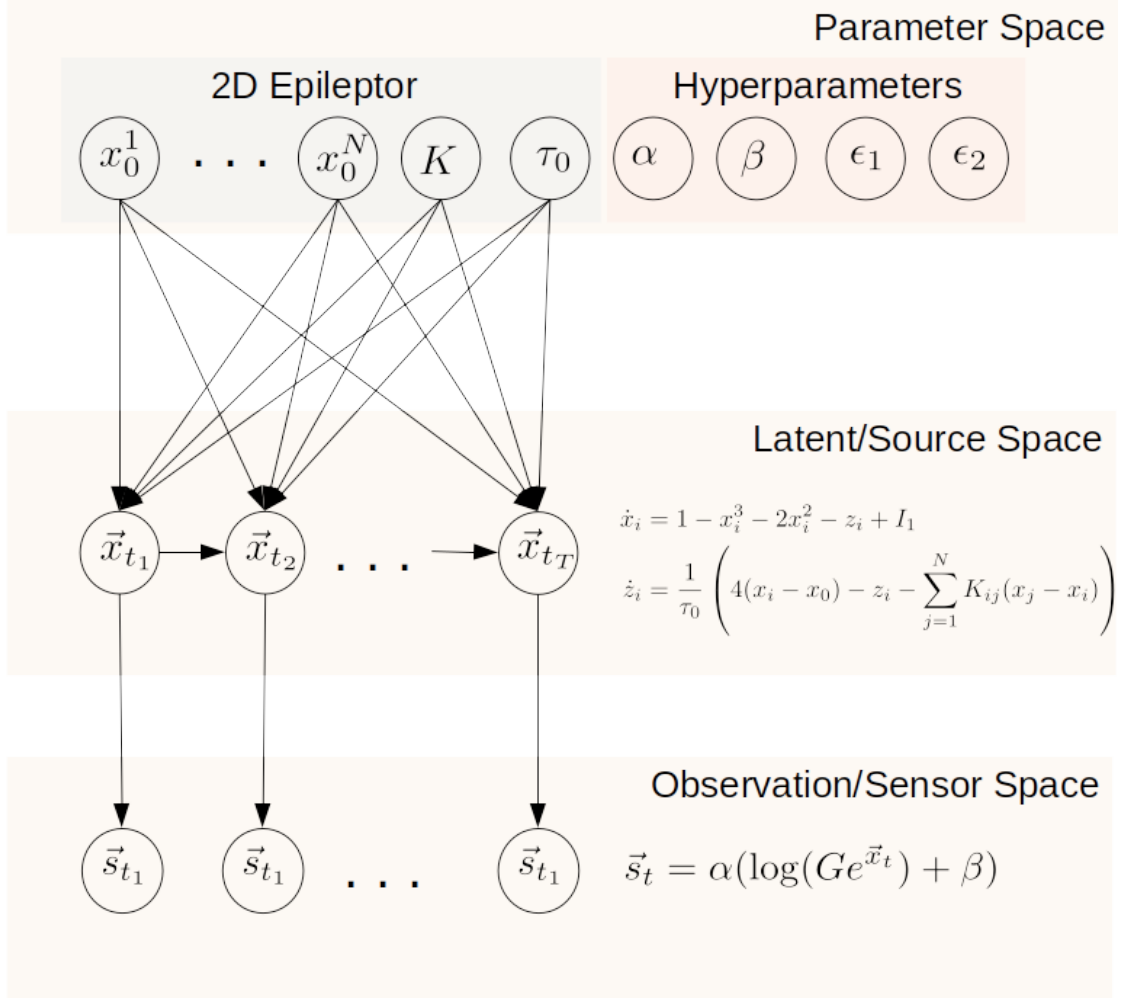


Figure 3: model