

---

# Note 4

Yuhang Cai, Tianyi Wu

October 10, 2020

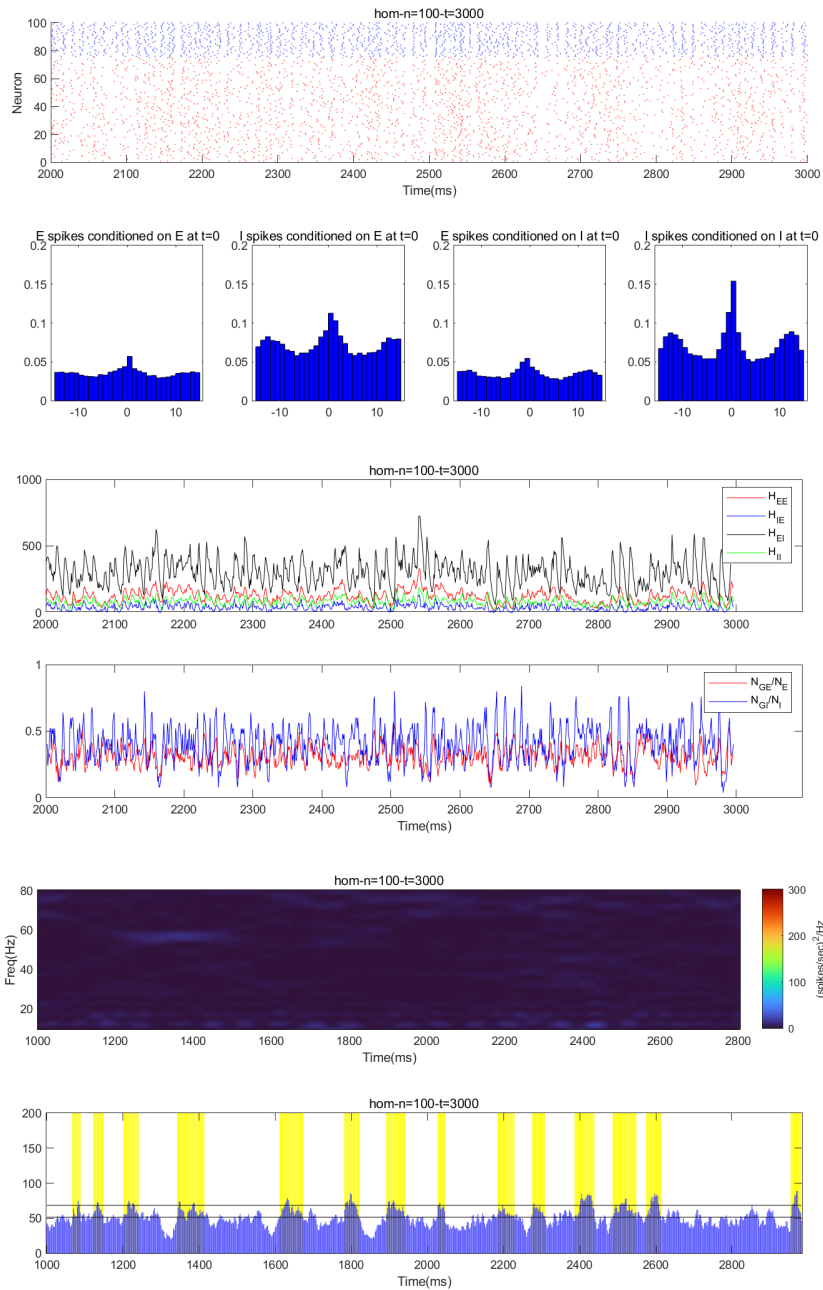
---

## 1 Results of Full Model

### 1.1 Hom

Statistics:

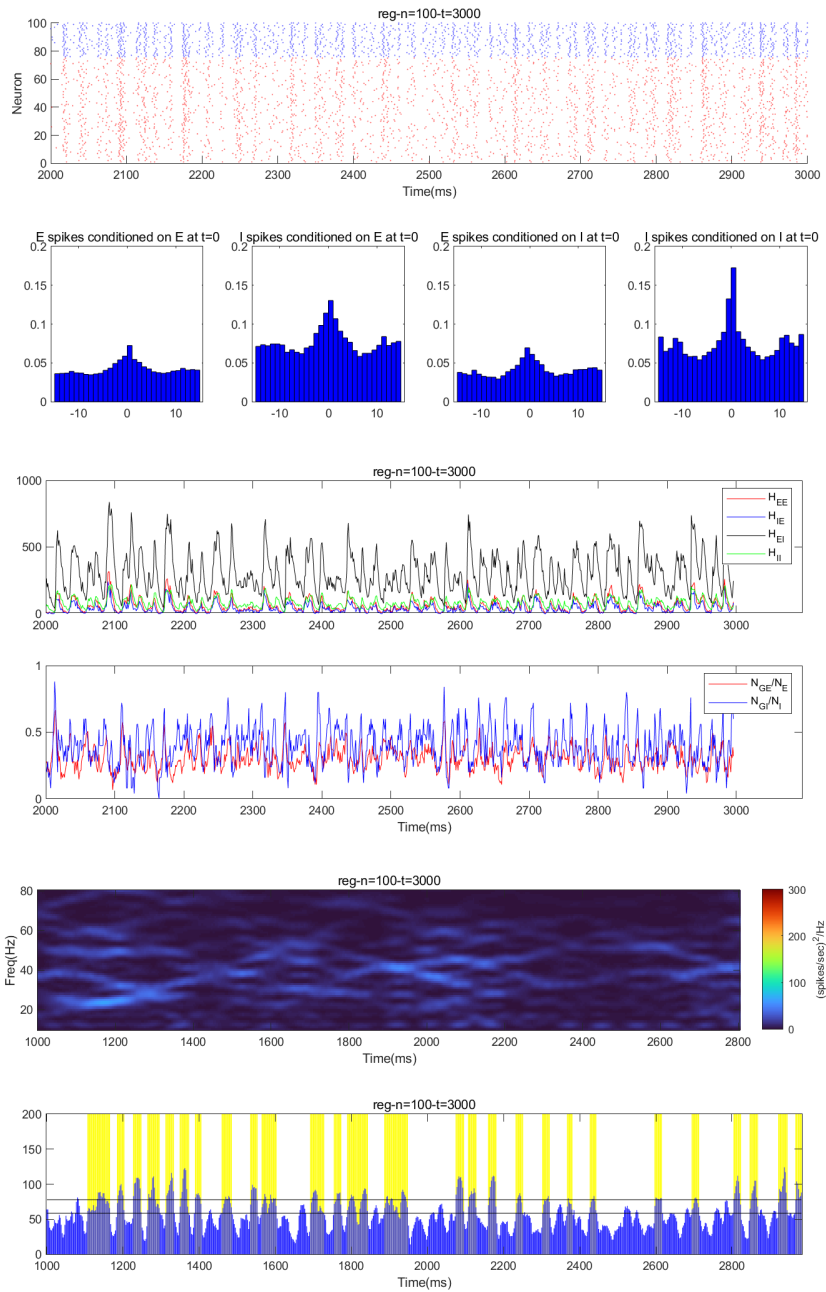
- E-firing rate: 34.4 spikes/s, I-firing rate: 70.1 spikes/s
- SSI: 0.16



## 1.2 Reg

Statistics:

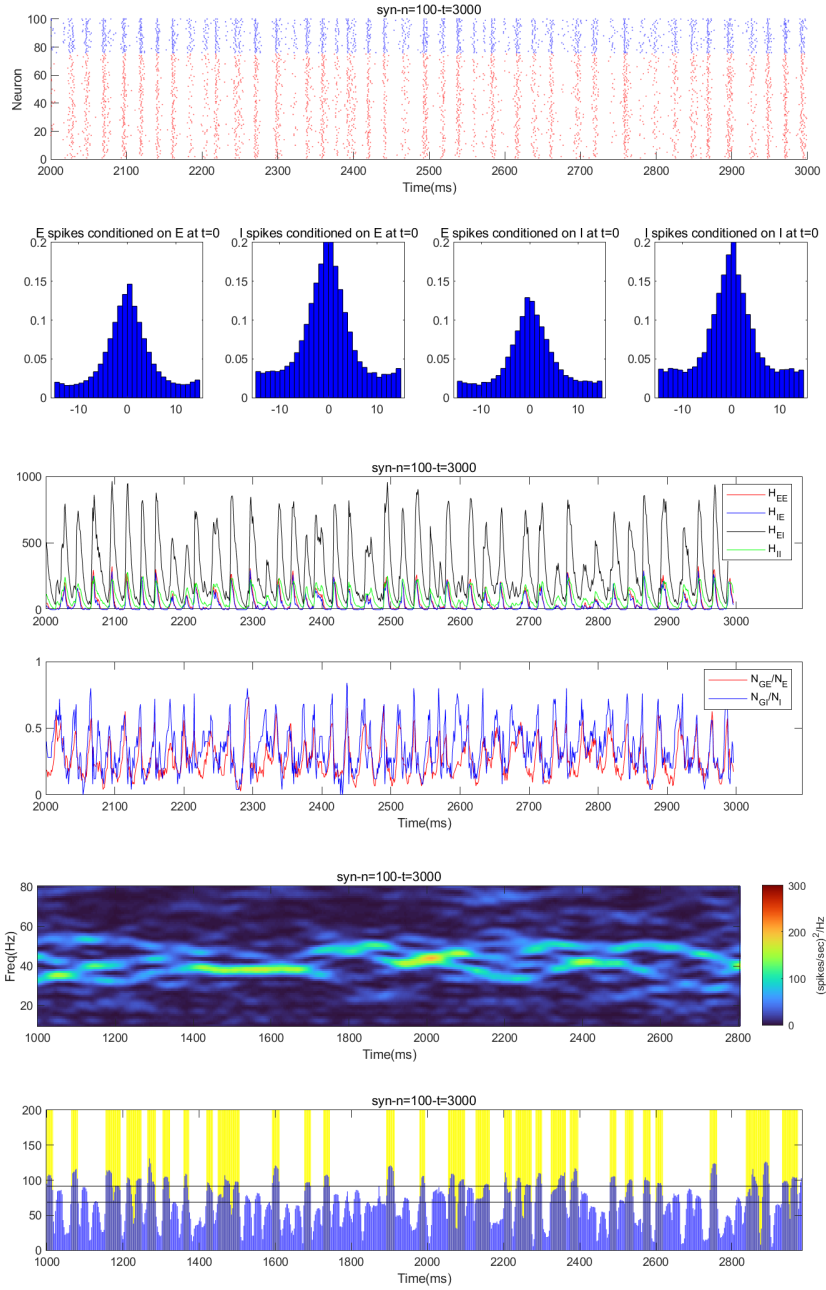
- E-firing rate: 39.0 spikes/s, I-firing rate: 73.7 spikes/s
- SSI: 0.31



### 1.3 Syn

Statistics:

- E-firing rate: 42.1 spikes/s, I-firing rate: 73.2 spikes/s
- SSI: 0.95

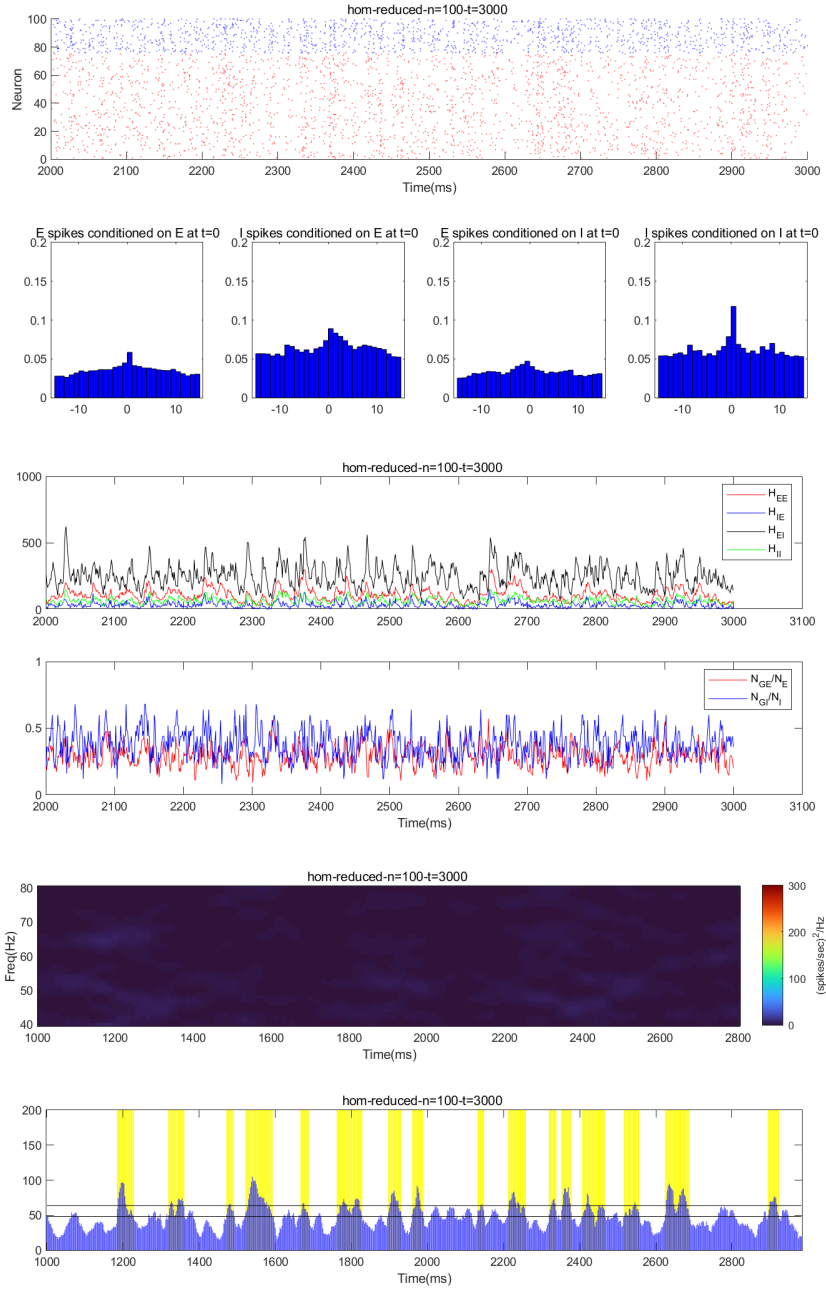


## 2 Results of reduced models

## 2.1 Hom

Statistics:

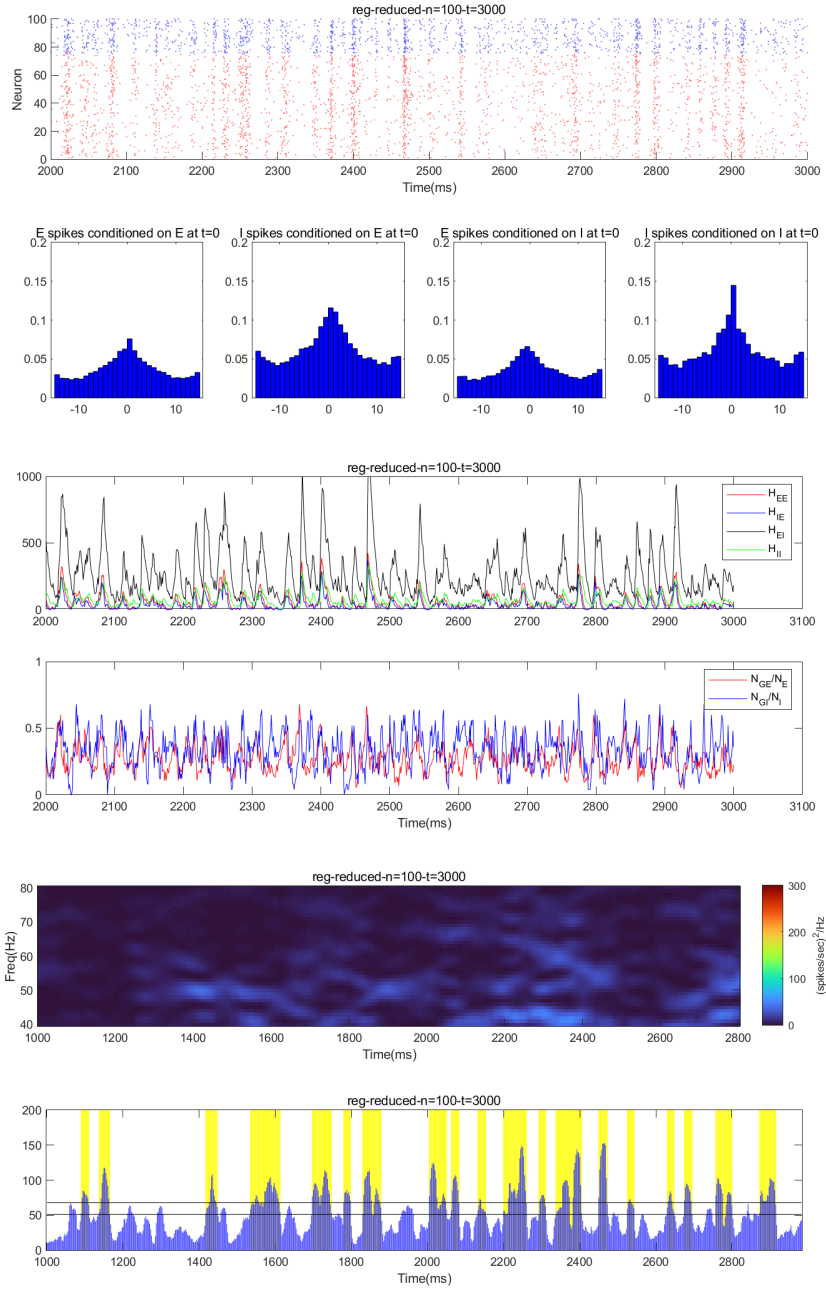
- E-firing rate: 31.6 spikes/s, I-firing rate: 58.3 spikes/s
- SSI: 0.25



## 2.2 Reg

Statistics:

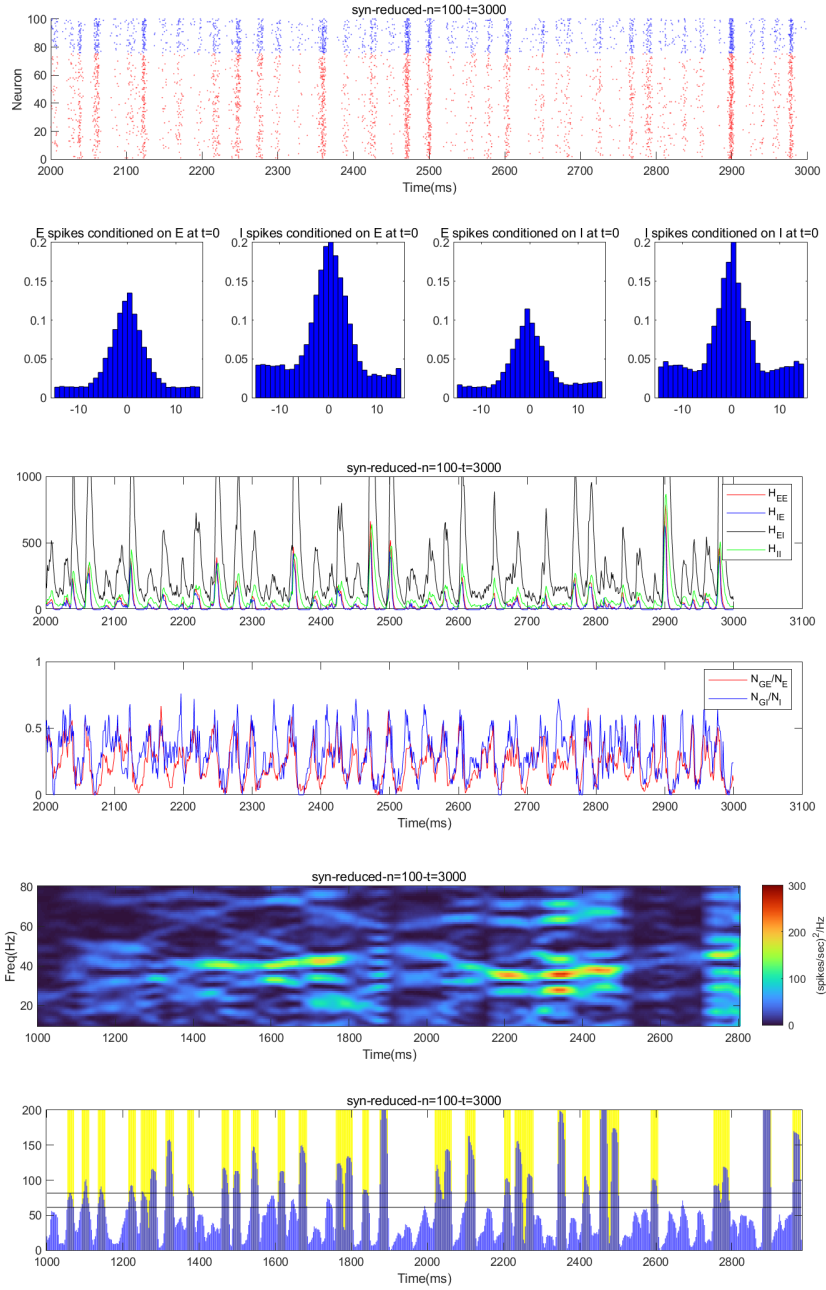
- E-firing rate: 34.1 spikes/s, I-firing rate: 61.8 spikes/s
- SSI: 0.66



## 2.3 Syn

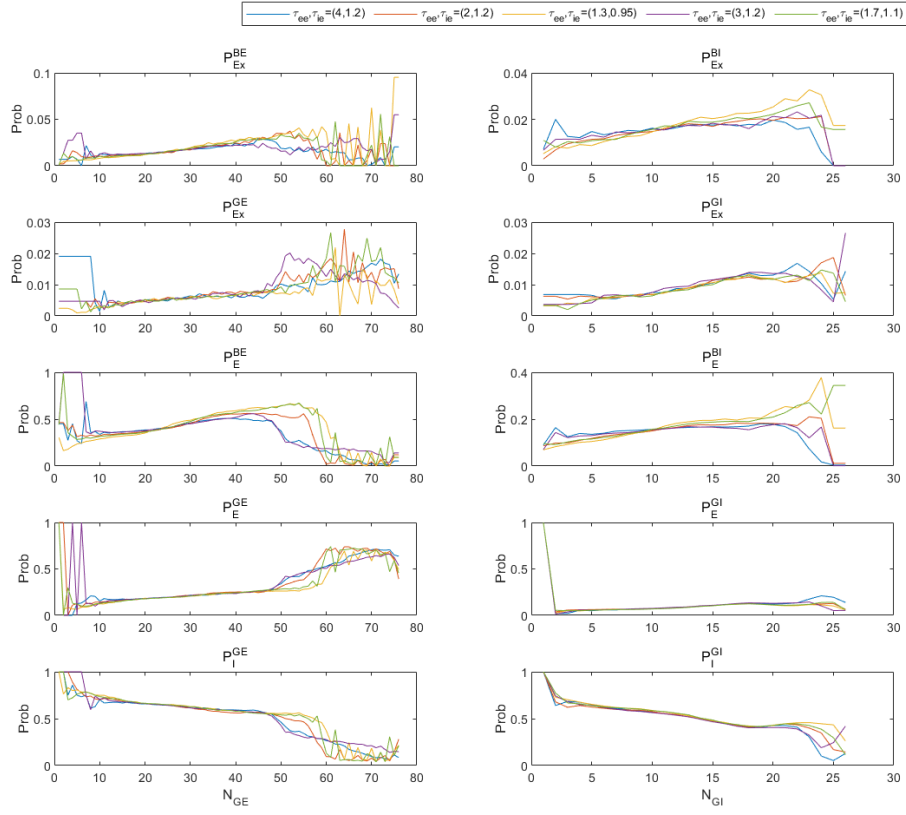
Statistics:

- E-firing rate: 45.1 spikes/s, I-firing rate: 83.2 spikes/s
- SSI: 1.03



### 3 Other results

#### 3.1 P versus varying tau



### 3.2 P versus different bar

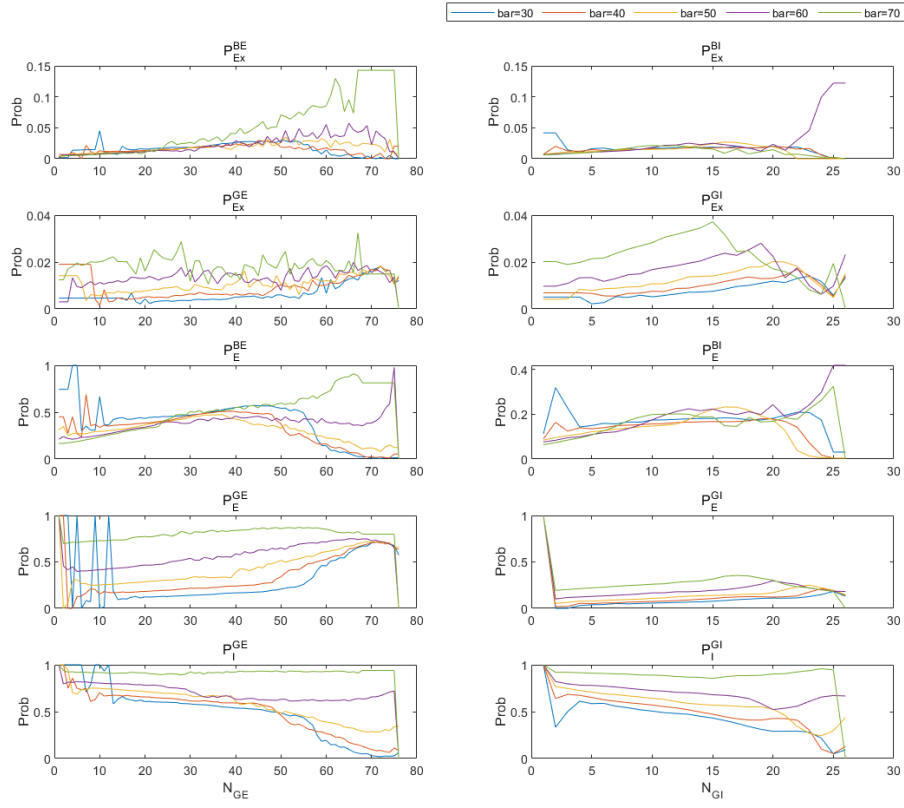


Figure 1: Hom



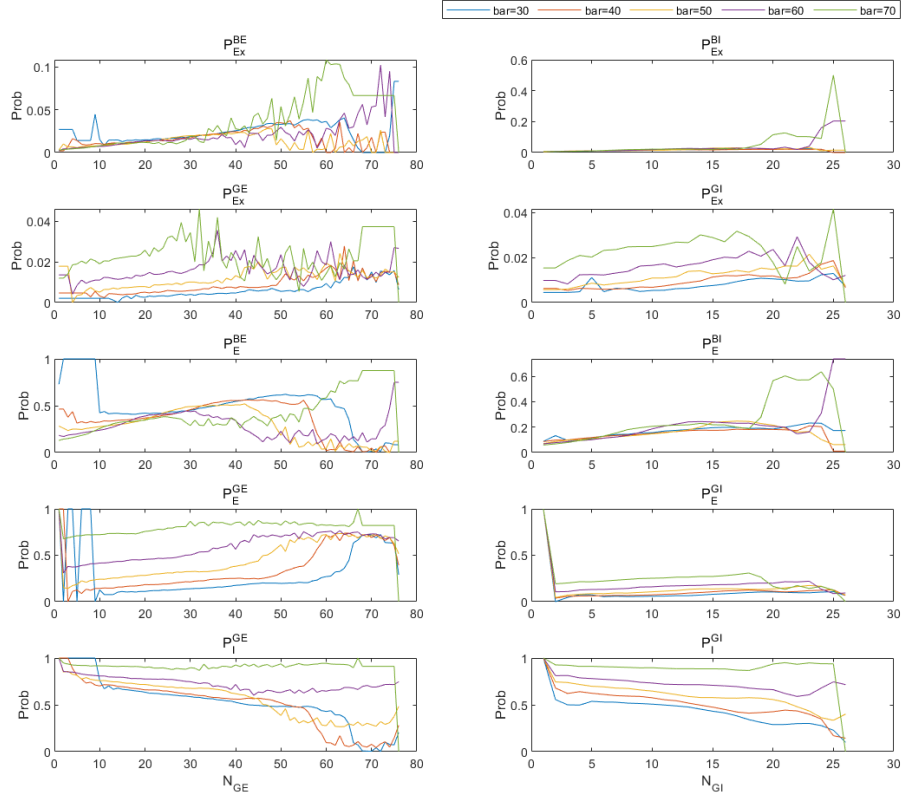


Figure 2: Reg

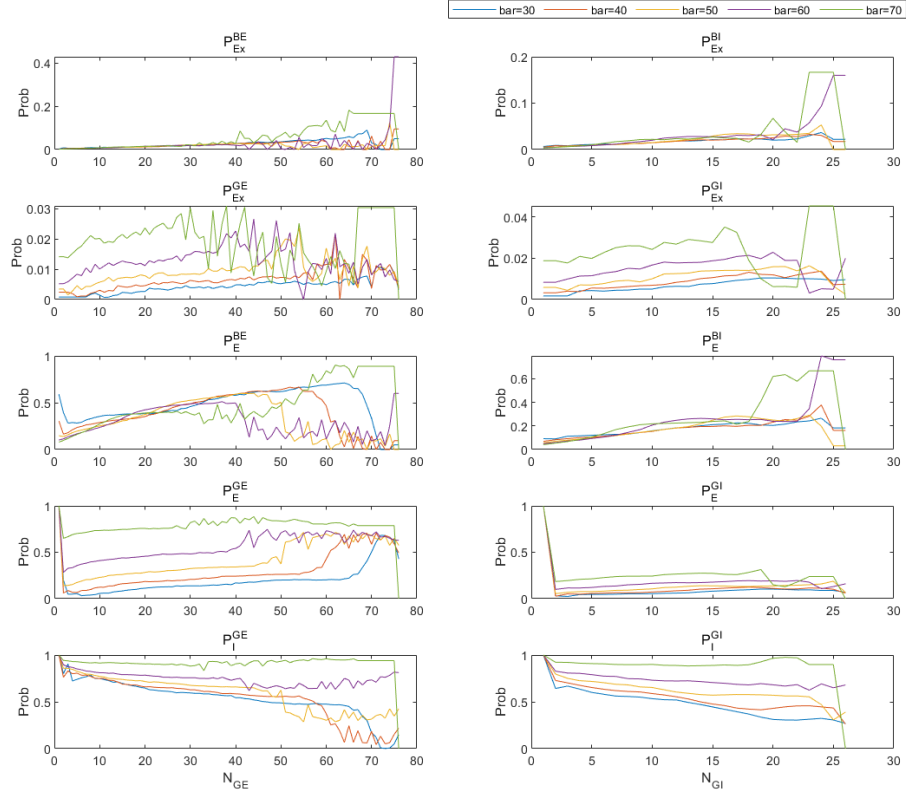


Figure 3: Syn

### 3.3 MFE frequency versus $\lambda$ (input) in reduced model

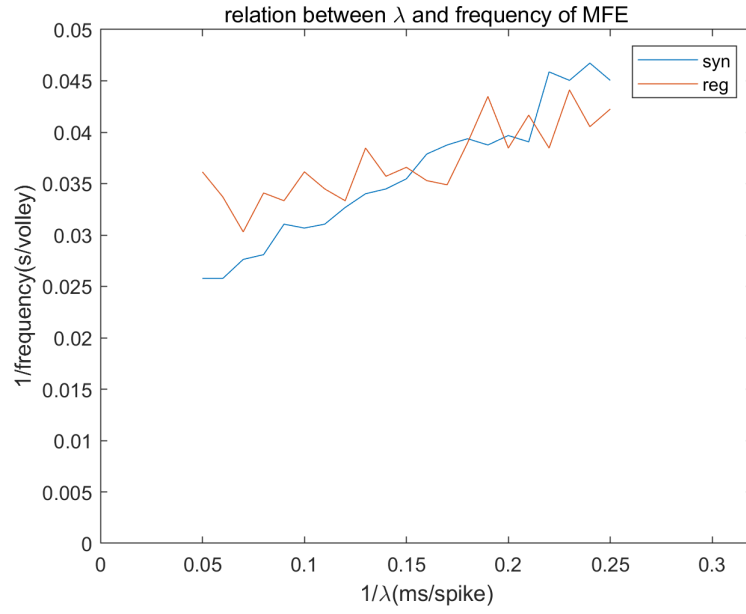


Figure 4: frequency of MFE and  $\lambda$