

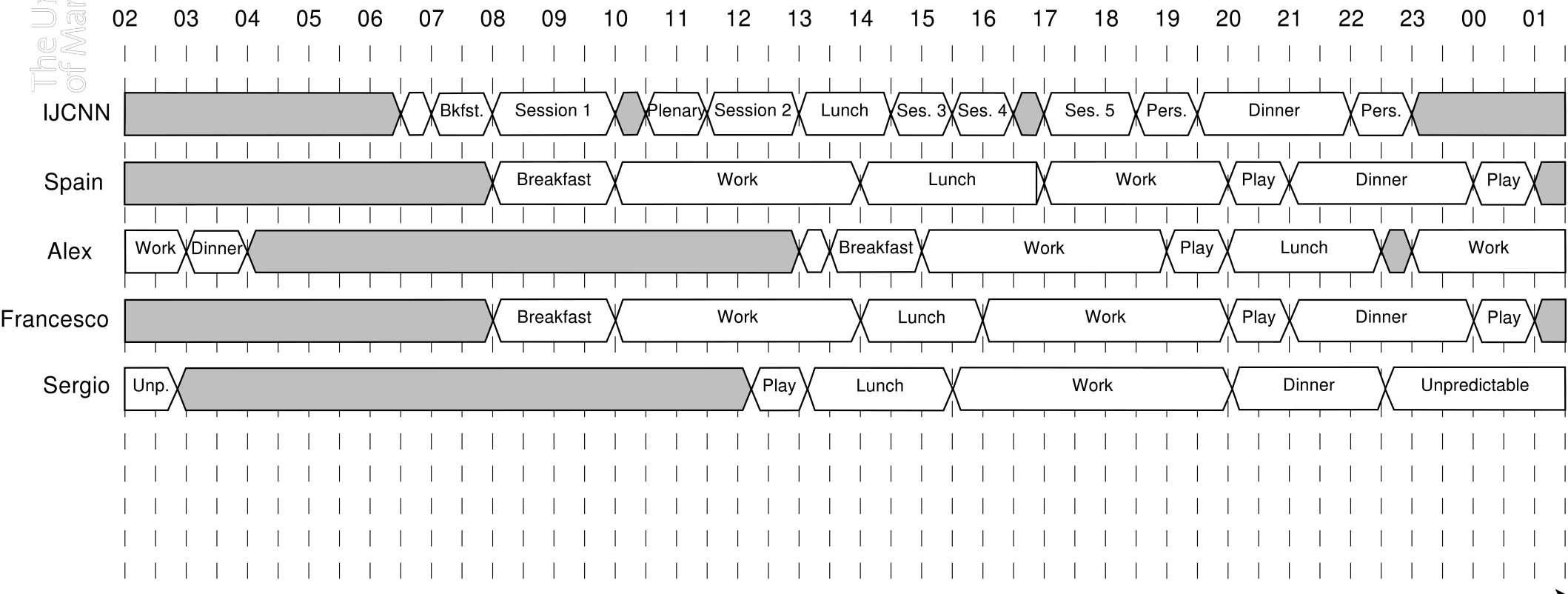
IJCNN2010

Report of Activities

Alex Rast, Sergio Davies, Francesco Galluppi



The Problem

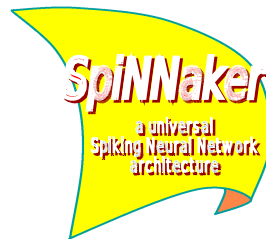


$$\omega_{IJCNN} = \omega_{Alex} = 2\omega_{Spain}$$

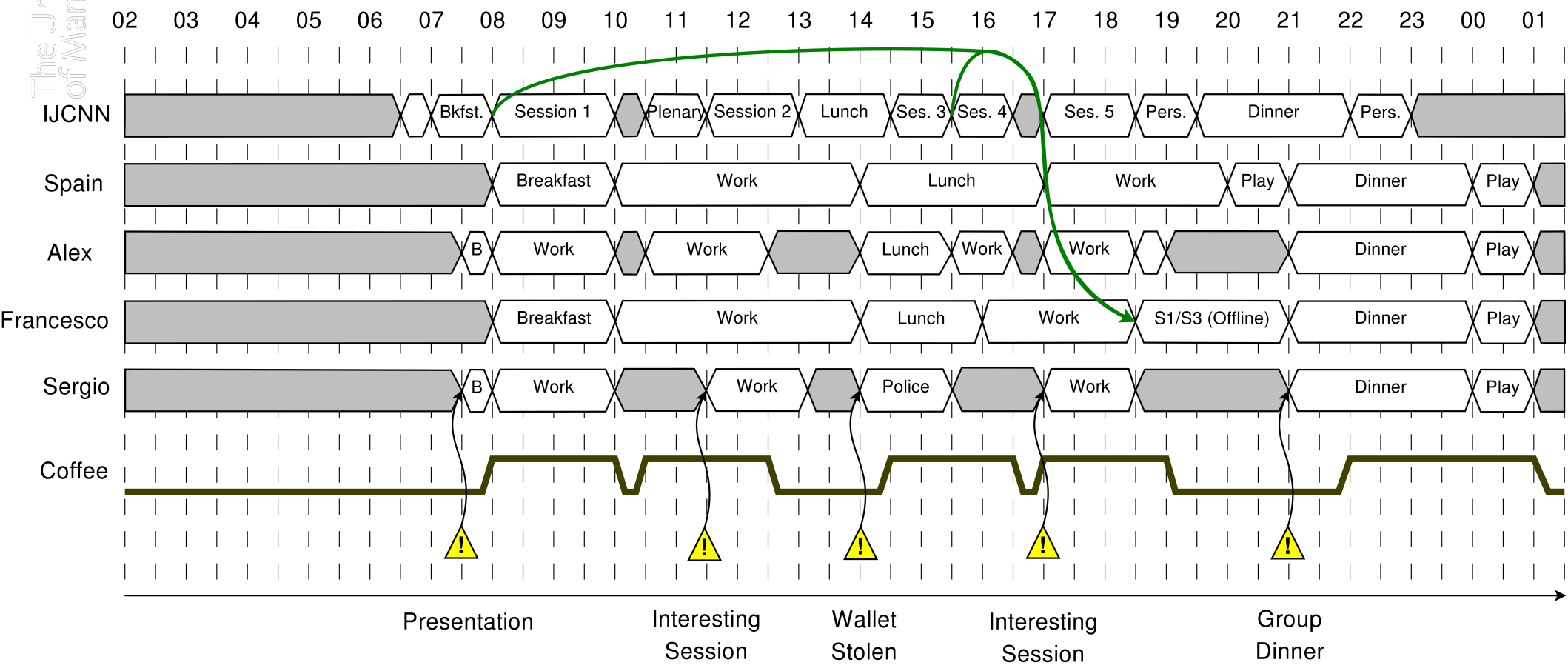
$$\omega_{Francesco} = \omega_{Spain}$$

$$\omega_{Sergio} = \{\text{Asynchronous}\}$$

A Synchronisation Problem!



The Solution



Sergio: Event-Driven Processing - Sleep With Wake-on-Event

Francesco: Deferred-Event Model - Read Sessions Offline

Alex: Spike-Based Input - Use Coffee As Activation



The Presentations

Francesco on InitLoad

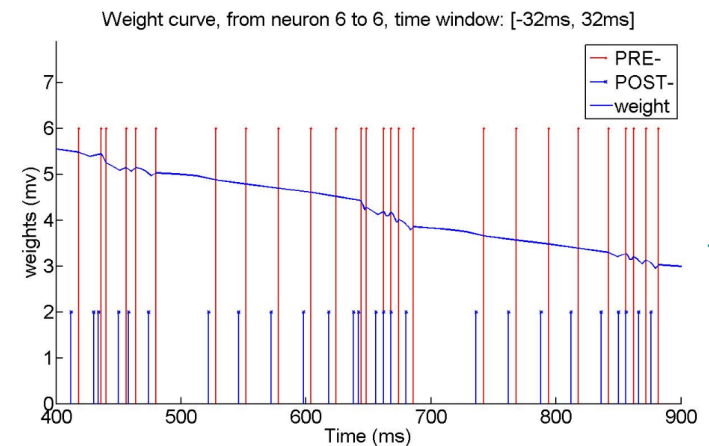
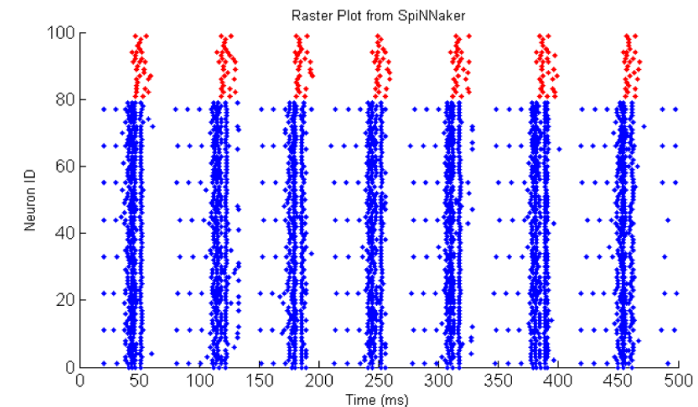
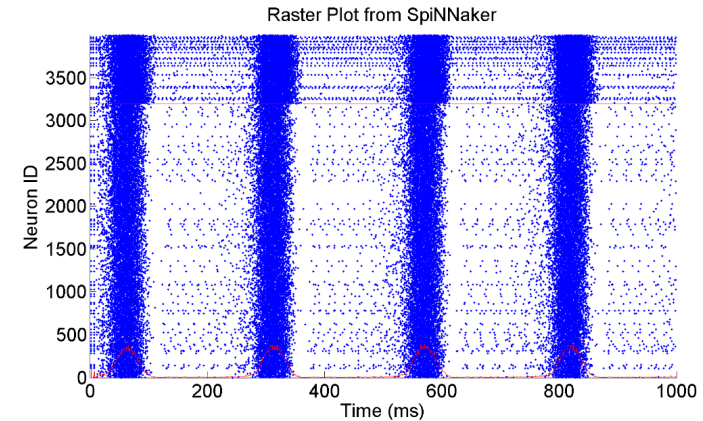
Alex On LIF Model

Sergio on STDP Model

All Well-Received

The Board Helped

Possible Interest From
Ganesh Venyagamoorthy

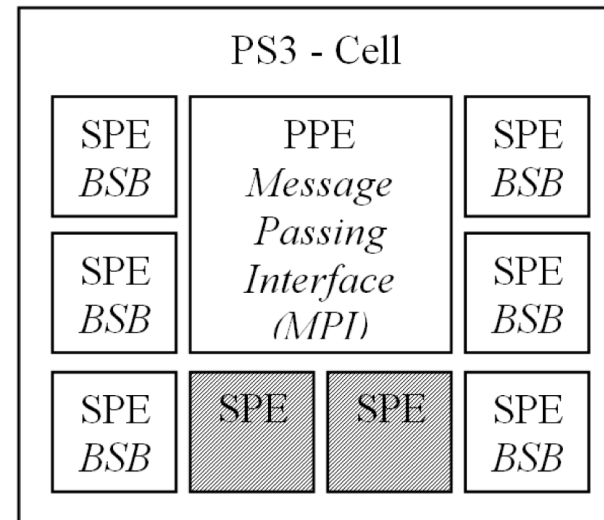
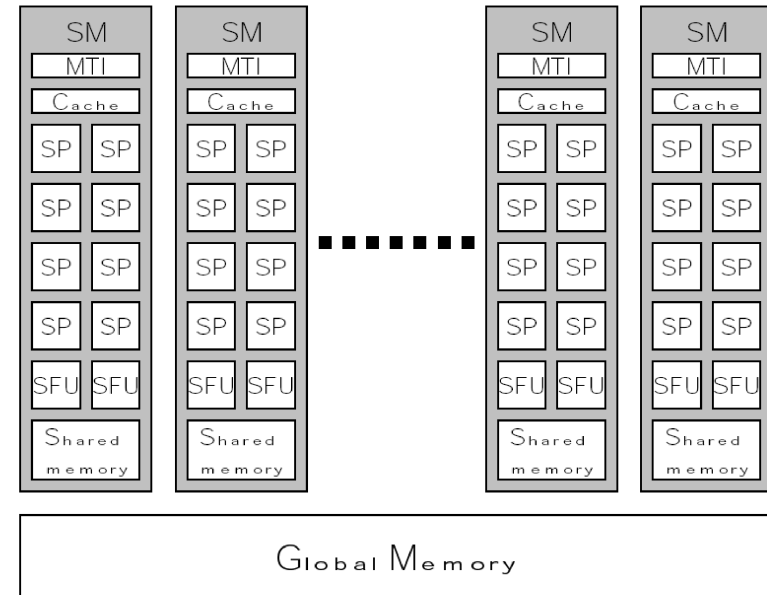


The Papers: Hardware

Spiking Networks on GPU's
(Fidjeland, Shanahan, and Han, Taha)

Spiking Networks on PS3s
(Bishop, Linderman)

Spiking Networks on Robots
(Marcos, Verschure)



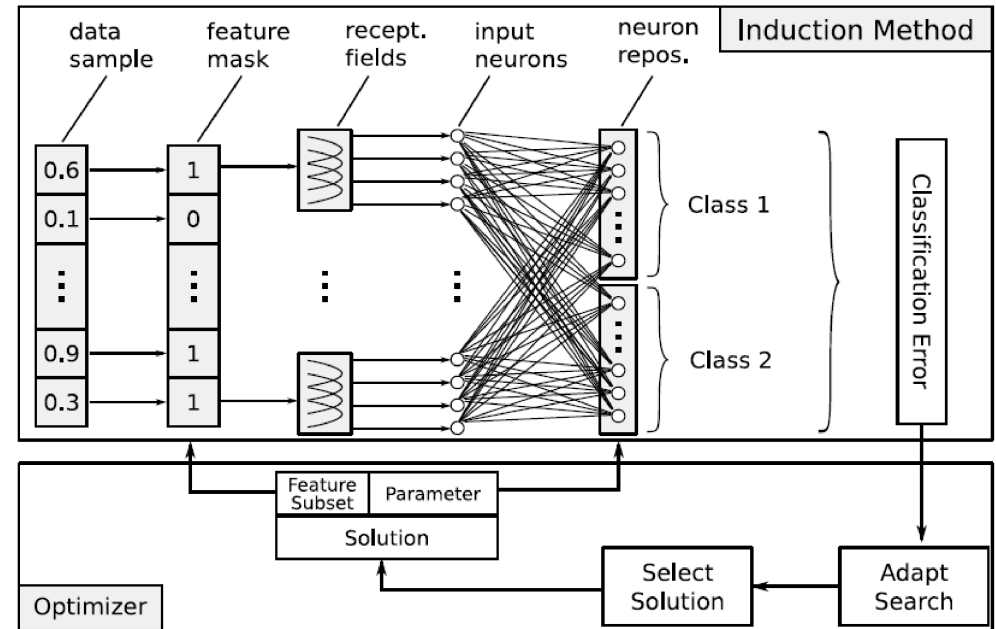
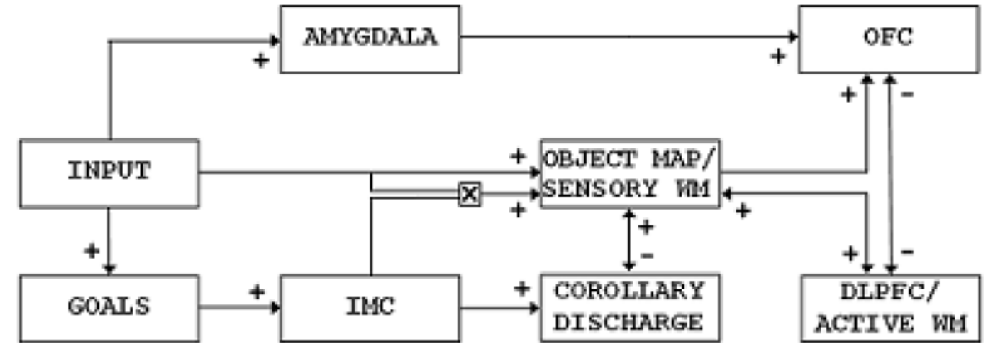
The Papers: Models

Evolving Spiking Networks
(Schliebs, Kasabov)

Brain-Guided Attention
(Taylor)

Hippocampus (Fox, Prescott)

**Inhibition-Based Sensory
Feature Extraction**
(Glackin, McDaid)



The Panels and Plenaries

Autonomous Machine Learning

(Asim Roy, et al.):
Much Still to Do!

Fuzzy Clustering

(Enrique Ruspini):
What Does a Group Mean?

Computer Vision

(Ricardo Baeza-Yates, Jim Keller): The Challenge is in Finding Higher-Level Meaning

The Time Domain

(Ravi Rao):
Spatiotemporal Information
Translates to Structure

