TWEPP 2013 - Topical Workshop on Electronics for Particle Physics



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Biologically-Inspired Massively-Parallel Computation

Thursday, 26 September 2013 14:00 (45 minutes)

The SpiNNaker (Spiking Neural Network Architecture) project aims to deliver a machine, ultimately incorporating a million ARM processors, optimised for running large-scale models of systems of spiking neurons running in biological real time. The major challenge in developing the machine has been to reproduce the very high levels of connectivity found in the brain; this has been achieved by using a very lightweight multicast packet-switched network that can carry very large numbers of very small packets, each carrying information about an individual neural spike.

Presenter: FURBER, Steve

Session Classification: Plenary 6