Contribution ID: **72** Type: **not specified**

Synchrotron for Neuroscience – an Asia Pacific Strategic Enterprise" (SYNAPSE)

Friday, 18 November 2022 13:30 (30 minutes)

We plan to comprehensively map the neuron network of an entire human brain at sub-cellular level to reveal the connections. This historical target is made possible by the recent performances of synchrotron x-ray microscopy: 0.3 micrometer resolution at 1 mm3/min image taking speed. However, mapping one human brain would take a very long time and generate a huge amount of data. To overcome problems, SYNAPSE adopts a strategy of simultaneous image acquisition by several synchrotrons and coordinated data management. SYNAPSE will also use other advanced imaging techniques besides synchrotron microscopy: infrared spectromicroscopy, super-resolution visible light 3D microscopy and cryo-electron tomography.

Presenter: Prof. CONSORTIUM, SYNAPSE (SYNAPSE)

Session Classification: Plenary

Track Classification: AfLS