



2 de JUNIO de 2021

12.00 h  
Zoom

• INMA Junior

**Can we build an artificial brain?**

**Panagiotis Koutsogiannis**  
**INMA-CSIC/UNIZAR**

Modern applications require efficient and advanced electronic devices to cope with demanding AI and machine learning algorithms. The current technology based on CMOS technology and von Neumann architecture, being time and energy wasteful, will be powerless to support the high demands of future technology. Mediation can be found in the working principles of the most efficient computer that ever existed, the human brain. Assimilating the basic brain functions, the fabrication of an artificial brain becomes more realistic. However, the complexity of the human brain and the lack of materials that can completely mimic the biological neurons and synapses hinder the development of an artificial brain. The question then arises: Can we build an artificial brain?

**DIFFRACTION-FREE ELECTRON BESSEL BEAMS**

**Simon Hettler**  
**INMA-CSIC/UNIZAR**

Electron-beam shaping open up possibilities for novel applications in electron microscopy. Diffraction-free electron beams are promising for imaging with a high depth of focus. This talk deals with the experimental realization of diffraction-free Bessel beams with 3D phase masks

Enlace  
Zoom:

