

Session Program

8-13 Jun 2025



**Canadian Association
of Physicists**

**Association canadienne
des physiciens et physiciennes**

2025 CAP Congress / Congrès de l'ACP 2025
(DPMB) M1-9 | (DPMB)

Monday 9 June

10:15

(DPMB) M1-9 | (DPMB): Emerging Order: Probing Nature Through Light, Motion, and Memory

Session

10:30-10:45

Classification of Retinal TDP-43 and Amyloid beta Deposits as Biomarkers of Differing Neurodegenerative Diseases

Speaker

Lyndsy Acheson

10:45-11:00

Computational Analysis of Dioxin-Like Compounds: Investigating Interactions with AhR and Cytochrome P450 Enzymes

Speaker

Mr Ali Abdolazadeh Ziabari

11:00-11:15

Measuring Photosynthetic Health Through Delayed Fluorescence: a New Device and Biometric for Environmental Health

Speaker

Elizabeth Allison

11:15-11:30

Avalanche dynamics in a 2D tumbling drum with frictionless, cohesive oil droplets

Speaker

Simaya Rosenbloom

11:30-11:45

Photon-to-Digital Converters - 3D Integrated Digital Single-Photon Detector Arrays Enabling Time-of-Flight PET and CT

Speaker

Prof. Serge Charlebois

11:45-12:00

Accuracy of Hyperspectral Near-Infrared Spectroscopy in Measuring Tissue Water Content

Speaker

Dr Mamadou Diop

12:00-12:15

Design of Gradient Coil Geometry for a Halbach-Based Ultra Low-Field MRI System

Speaker

Jacob Beaudoin

12:15-12:30

A Fast Method for Mapping pH using Magnetic Resonance Imaging

Speaker

Nicole Lofroth

12:30