Session Program

7-12 Jun 2020



Canadian Association of Physicists

Association canadienne des physiciens et physiciens

2020 CAP Virtual Sessions / Sessions virtuelle de l'ACP 2020

DPP-1: Plasma Physics Symposium

Virtual Platforms

Monday 8 June

10:00

DPP-1: Plasma Physics Symposium

Session | Location: Virtual Platforms | Convener: Lenaic Couedel

10:00-10:10 Welcome and Introduction

10:10-10:45 Magnetic Reconnection in Magnetized Hot Plasmas

Speaker

Dr Magali Muraglia

10:45-11:20 Dust nucleation in very-low pressure plasmas

Speaker

Dr Richard Clergereaux

11:20-11:55

Fluctuation dynamo in collisionless and weakly collisional, magnetized plasmas

Speaker

Dr Denis St-Onge

11:55-12:00 Global-local gyrokinetic simulations of the tokamak pedestal

Speaker

Denis St-Onge

12:00-12:15 **Break**

12:15-12:35

Advances in N-doped Diamond Thin Films Grown by Microwave Plasma CVD

Speaker

Michael Bradley

12:35-12:55

The spatiotemporal dynamics of a plasma streamer induced by nanosecond discharges at the water surface

Speaker

Mr James Diamond

12:55-13:15

Non-equilibrium nature of argon-based radiofrequency and microwave plasmas at atmospheric pressure evidenced by hyperfine optical emission spectroscopy

Speaker

Mr Francis Labelle

13:15-13:20

Determination of the electrical circuit equivalent to a pulsed discharge in water: assessment of the temporal evolution of electron density and temperature

Speaker

Mr M. Thomas

13:20-13:40

Ultra-high-resolution optical absorption spectroscopy using a supercontinuum laser combined with a widely tunable filter and a hyperfine spectrometer

Antoine Durocher-Jean

13:40-14:00 **Break**

14:00-14:35

Modification of cellulose-based materials and nanomaterials by cold, atmosphericpressure plasma treatments

Speaker

Prof. Luc Stafford

14:35-15:10

Kinetic simulations of electron transport in plasmas relevant for fusion and space applications

Speaker

Salomon Janhunen

15:10-15:30

Turbulence and anomalous electron transport in the Electron Cyclotron Drift Instability

Speaker

Ms M. Jimenez

15:30-15:50

A study of the behaviour of dispersed tungsten micro particles in the STOR-M tokamak

Speaker

Mr Nathan Nelson

15:50-15:55 Plasma Acceleration in the Magnetic Nozzle

Speaker

Andy Sabo

15:55-16:00 Spatial and time-resolved characterization of HiPIMS spokes

Speaker

Mr Alex Chang

16:00-16:15 Break

16:15-16:50

Warm dense matter studies using ultrafast optical and extreme ultraviolet laser pulses

Speaker

Ying Tsui

16:50-17:25 Laser plasma interactions in fusion scale plasmas

Speaker

Jason Myatt

17:25