

Subject: FW: PAGE conference May 10 - REMINDER

From: Janaki DeCamillis - To: - Cc: - Date: May 7, 2018 at 3:04 PM

Dear PHAS faculty and graduates,

This is a reminder that the upcoming PAGE conference will take place on **Thursday, May 10**, in the Life Sciences Building (**LSB 106**). Please join us throughout the day in order to support your friends and fellow graduate students as they present their research.

Please also join us for lunch that day in LSB 107, from 12:30 - 1:30 pm.

A reminder that this year's **keynote speaker will be Louis Marmet**, who is an adjunct professor here at York University and has worked for the National Research Council of Canada (NRC) for over 20 years. Please show your support in welcoming him and attending his talk:

Title: "Cold Atoms, Cool Lasers, and a light-atom interaction that can heat interstellar gases"

Abstract: The last decades of laboratory experimentation have given us a good understanding of the physical mechanisms involved in atomic cooling in laser radiation. As a result, laser cooling and trapping is well developed experimentally as a powerful tool used to manipulate atoms at sub-Kelvin temperatures. However, interactions between light and atoms usually results in an increase of the atomic temperature. One might then ask: can a 'cooling mechanism' become a 'heating mechanism', and if so, under which conditions? I will briefly review some experimental techniques used in laser cooling and trapping, and the type of physical mechanism involved for each. Then the talk will focus on the dipole force: Of interest is that the conditions needed to produce significant dipole heating are often found in space. The temperature of interstellar gases, which mainly depends on resonant heating, might be increased by dipole heating. I will describe how this small effect can be measured experimentally with an atom interferometer.

PAGE CONFERENCE SCHEDULE:

10:00 - 10:15 am --- PAGE introductory remarks

10:15 - 10:35 am --- **Olga Andriyevska**: Ultrafast magnetization dynamics near Curie temperature

10:35 - 10:55 am --- **Alex Pouliot**: Better under pressure: high-precision alkali magnetometers

10:55 - 11:15 am --- **Shany Oommen**: Investigation of nanoscale and ultrafast thermal transport in nanoscale systems using time-domain thermorefectance technique

11:15 - 11:30 am --- Coffee break

11:30 - 12:30 pm --- Keynote talk - Louis Marmet: Cold atoms, cool lasers, and a light-atom interaction that can heat interstellar gases

12:13 - 1:30 pm --- Lunch break (LSB 107)

1:30 - 1:50 pm --- **George Conidis**: The peculiar posturing of our neighbouring galaxies: might our Milky Way be responsible?

1:50 - 2:10 pm --- **Mizanur Rahman**: Investigation of heat transport in nanoscale carbon-based materials and composites through beam offset frequency domain thermo-reflectance

2:10 - 2:30 pm --- **Keavin Moore**: A universal spin-mass relation for brown dwarfs and planets

2:30 - 2:50 pm --- **Janakan Siva**: Active galaxies: a hunt to understand what feeds these galactic monsters

2:50 - 3:05 pm --- Coffee break

3:05 - 3:25 pm --- **Wen-Yi Song**: The strong CP problem and axions

3:25 - 3:45 pm --- **Travis Valdez**: A preliminary presentation of a precision probe of the proton proportion predicament

3:45 - 4:05 pm --- **Antoine Borget**: Automatic peptides detection and hydrogen exchange in time-of-flight mass spectrometry

4:05 - 4:25 pm --- **Ivan Guevara**: The positronic atomic experiment

4:25 - 4:40 pm --- Judges deliberation/Coffee break

4:40 - 4:45 pm --- Award winners announced

Look forward to seeing everyone there!

Best,
Hermina

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