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# **NANOGrav Fall Meeting Program**

## **McGill University, 19-21 Oct. 2015**

**Black = Misc. talks and demos.**

**Blue = plenary discussion.**

**Maroon = break-out session.**

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### **Student preparation:**

Ryan Lynch will coordinate with the SOC a “pre-session” on webex the week before for undergrads/new grad students to prepare them for relevant science and concepts for the meeting. This is still in the works; details to follow.

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# DAY 1

**Session 0:**

**08:45 - 09:00**

**Welcome & Logistics**

**Session 1:**

**09:00 - 10:30**

**Rapid-fire Working group updates**

GW Astrophysics - *Mingarelli or McWilliams (?)*

Cyber Infrastructure - *Rob Ferdman*

Detection - *Justin Ellis*

Education & Outreach - *Ryan Lynch*

IMM - *Dan Stinebring*

Noise budget - *Jim Cordes*

Searching - *Joe Swiggum*

Timing - *David Nice*

**Session 2:**

**10:45 - 12:15**

**Break-out session #1**

Timing: ""

Education&Outreach: *"SPOT talks and misc. outreach"*

Detection+Astrophysics: *"Strategies to incorporate/recover galaxy and black-hole properties (+ misc. discussion)"*

**LUNCH**

**12:15 - 14:00**

**Session 3:**

**14:00 - 15:30**

**Misc. Science Talks** (10min per)

Megan Jones, *"The 9yr Dataset: Measurement and Interpretation of DM Variations"*

Michael Lam, *"Seeking the cause of DM variations"*

Joe Swiggum, *"Flux density distributions of NANOGrav pulsars"*

**DISCUSSION: The scientific future of GWBs** (60min)

Talks and subsequent discussion of a turn-over in the GWB spectrum, and how this might impact NANOGrav's future techniques and science.

Speakers followed by discussion (~10 minute talks + one question):

Chiara Mingarelli, *"9-year GWB limit synopsis in brief"*

Sean McW, *"Low-frequency turnovers: why worry?"*

Steve Taylor, *"Revisiting scaling laws and time-to-detection projections"*

**Session 4:**

**15:45 - 16:45**

**Diversity and Harassment scenarios**

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## DAY 2

### Session 1:

**09:00 - 10:30**

#### **Misc. Science Talks** (10min per except where noted)

Elinore Roebber (15min), "*Cosmic variance in the stochastic GWB*"

Dusty Madison, "*Applying the A+A× methods to PPTA data*"

Justin Ellis, "Trans-dimensional signal modeling in PTA data"

Laura Sampson, "*Investigating GW detection strategies and confidence*"

Kristina Islo, "*Gravitational Wave memory source populations*"

#### **Demonstrations** (~30min)

Lam+Romano et al., "*Metronome demo*" (5-7 mins)

Lam+Chatterjee, "*Quicklook*" (5-7 mins)

Lommen, "*The Bridge web portal*" (5-7 mins)

Ferdman, "*Data/visualization tools*" +brief discussion (9 mins)

### Session 2:

**10:45 - 12:15**

#### **Break-out session #2**

Interstellar Medium Mitigation: ""

Noise Budget: ""

Astrophysics: "*Eccentric binaries*"

### LUNCH

**12:15 - 14:00**

### Session 3:

**14:00 - 15:30**

#### **Misc. Science Talks** (10min per)

Emmanuel Fonseca, "*Shapiro delay measurements in the 9yr data*"

Cherry Ng, "*Incorporating archival data and new revisions on the Strong Equivalence Principle test*"

Fredrick Jenet: "*The ARCC Program*"

Froney Crawford: "*ARCC at F&M*"

#### **DISCUSSION: Noise budget** (50min)

TBD; Nice, Stinebring, Cordes to organize.

### Session 4:

**15:45 - 17:00**

#### **DISCUSSION: Current and Next data release** (45min)

TBD; Ransom to organize.

**"Free work time"/Ad hoc break-out session** (30min)

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## DAY 3

### Session 1:

09:00 - 10:30

#### Break-out session #3?

Detection+Timing: *"Using wide-band timing in GW analysis"*

Cyber Infrastructure: ""

### Session 2:

10:45 - 12:30

#### Misc. Science Talks (7-10min per)

Michele Vallisneri, *"Prospects/issues in scaling searches to IPTA datasets"*

Sarah Henderson, *"An Analysis of Mode Switching in PSR J0332+5434"*

Caitlin Rose, *"UHE Cosmic Rays and the Search for Their Origin"*

Luo Jing, *"PINT(PINT is not tempo)"*

Shriharsh Tendulkar, *"CHIME Update"*

#### DISCUSSION: Funding & Telescopes (25-30 minutes)

TBD; Madison to organize.

Summary talk from someone(s) senior

THE END.

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