

August 29th Monday

9:30 a.m. - 10:30 a.m. Refreshments

10:30 a.m. - 10:50 a.m. Welcome (J. McKee)

Overview Talks

Session Chair 10:50 a.m. - 11:20 a.m. Scintillation Arc Survey Overview (D. Stinebring)
Ue-Li Pen

11:20 a.m. - 11:50 a.m. Analysis of Arc Structures in the Scintillation Arc Survey
(B. Rickett)

11:50 a.m. - 12:30 p.m. Waves, Rays, Noodles, and Snowballs
(C. Gwinn, online)

12:30 p.m. - 2:00 p.m. *Lunch*

Session Chair 2:00 p.m. - 2:30 p.m. Fantastic Beasts and Where to Hear Them: An Adaptation
James McKee of Radio Interferometry and Scintillation Analysis
Techniques to Bioacoustics (J. Lovell, online)

2:30 p.m. - 3:00 p.m. Refraction and Scattering by Neutral Gas Clouds
(M. Walker)

3:00 p.m. - 3:30 p.m. *Coffee Break*

3:30 p.m. - 5:00 p.m. Discussion

6:00 p.m. - 9:00 p.m. *Reception*
Chat Bar (307 Spadina Ave, Toronto)

August 30th

Tuesday

9:30 a m - 10:00 a m Refreshments

Scintillometry Techniques

Session Chair 10:30 a m - 10:40 a m Non-Stationary Spectroscopy (O. Wucknitz, online)

Tim Sprenger

10:40 a m - 10:50 a m Phase Retrieval in VLBI Using the θ - θ Transform (D. Baker)

10:50 a m - 11:00 a m Path Integrals for Radio Astronomy (J. Feldbrugge, online)

Session Chair 11:00 a m - 11:10 a m A New Method for Phase Retrieval in Pulsar Spectroscopy (S. Osłowski)

Mark Walker

11:10 a m - 11:20 a m *Coffee Break*

11:20 a m - 11:30 a m A New Method to Estimate Pulsar DM in the Presence of Scatter Broadening (J. Singha, online)

11:30 a m - 11:40 a m Scintillation Arcs in B1508+55 (T. Sprenger)

11:40 a m - 11:50 a m *Lunch*

Parabolic Arcs

Session Chair 11:50 a m - 12:00 a m A Two-Screen Analysis of a 36 Epoch Observation of B1737+13 (S. Siegel)

Dan Stinebring

12:00 p m - 12:10 p m Progenitors of Parabolic Arcs in Secondary Spectra of Pulsars (V. Soglasnov, online)

12:10 p m - 12:20 p m Properties of the Scintillation Frequency Structure and Constraints on Interstellar Interferometry (N. Bartel)

12:20 p m - 12:30 p m Multiple Scattering Screens in Six Pulsars (J. McKee)

12:30 p m - 12:40 p m *Coffee Break*

12:40 p m - 12:50 p m Discussion

August 31st

Wednesday

9:30 a.m. - 10:00 a.m. Refreshments

Lensing

Session Chair 10:00 a.m. - 10:20 a.m. Regimes in Astrophysical Lensing: Refractive Optics, Diffractive Optics, and the Fresnel Scale (D. Jow)
Fang Xi Lin

10:20 a.m. - 10:40 a.m. Investigating Plasma Lensing Structures by Simulating the Propagation of Radio Wavefronts (K. Au)

10:40 a.m. - 11:00 a.m. What Plasma Microlensing Can Tell About Tiny-Scale Structures in the ISM (X. Shi, online)

11:00 a.m. - 11:20 a.m. Double-Lensing Event in PSR B0834+06 (H. Zhu)

11:20 a.m. - 11:50 a.m. *Coffee Break*

Origins of Scintillation

Session Chair 11:50 a.m. - 12:10 p.m. A Long-Baseline View of B1508+55: A Two-Screen System (V. Ram Marthi)
Ashley Stock

12:10 p.m. - 12:30 p.m. Tracing Transient Features in the Solar Wind with MWA IPS Observations (A. Waszewski, online)

Session Chair 12:30 p.m. - 2:00 p.m. *Lunch*
Barney Rickett

2:00 p.m. - 2:20 p.m. Scintillation in Multiwavelength Observations of PSR J1744-1134 (L. Guertin, online)

2:20 p.m. - 2:40 p.m. Bow Shocks of Scintillating Pulsars (S. Ocker)

2:40 p.m. - 3:00 p.m. Scintillation Structures in Pulsar Signals: Insights from Quantum Dynamics and Branched Flow (T. Kramer)

3:00 p.m. - 3:30 p.m. *Coffee Break*

Collaborative Work Session

September 1st

Thursday

9:30 a m - 10:00 a m

Refreshments

New Facilities

Session Chair
Hsiu-Hsien Lin

10:00 a m - 10:20 a m

Scintillation with the MeerKAT Thousand Pulsar Array:
First Results (R. Main)

10:20 a m - 10:40 a m

CHIME Overview (E. Fonseca)

10:40 a m - 11:00 a m

Scintillation Across Two Decades of Frequency
(K. Ross, online)

11:00 a m - 11:30 a m

Coffee Break

Giant Pulses and Fast Radio Bursts

Session Chair
James McKee

11:30 a m - 11:50 a m

Scattering Variations Detected from a
Repeating Fast Radio Burst (S. Ocker)

11:50 a m - 12:10 p m

Using Giant Pulses to Measure the Impulse Response
of the Interstellar Medium (N. Mahajan)

12:10 p m - 12:30 p m

Scintillometry with Radio Giant Pulses from the
Crab Pulsar (N. Lewandowska, online)

12:30 p m - 2:00 p m

Lunch

2:00 p m - 2:30 p m

Scintillometry of the Crab: Evidence for
Highly Relativistic Motion (M. van Kerkwijk)

Session Chair
Nina Gusinskaia

2:30 p m - 2:50 p m

Multipath Propagation of FRBs as a Tool for Uncovering
the Properties of Extragalactic Plasma (P. Beniamini, online)

2:50 p m - 3:10 p m

DM-power: an algorithm for high precision dispersion
measure and application to fast radio bursts (H. Lin)

3:10 p m - 3:30 p m

Gravitational Lensing and Scattering of
FRB Radio Waves (P. Kumar, online)

3:30 p m - 4:00 p m

Coffee Break

4:00 p m - 4:20 p m

*Scintillation of PSR J0437-4715 with MeerKAT
(D. Reardon)*

4:20 - 5:20 p m

Discussion

7:00 p m - 9:00 p m

*Conference Dinner
Faculty Club (41 Willcocks st)*

September 2nd Friday

9:30 a m - 10:00 a m

Refreshments

Orbital Studies

Session Chair
Daniel Baker

10:00 a m - 10:20 a m

Scintillometry Studies of Pulsar Triple System
PSR J0337+1715 (N. Gusinskaia)

10:20 a m - 10:40 a m

PSR B1744-24A Eclipses (D. Li)

10:40 a m - 11:00 a m

Lensing Around the PSR B1957+20 Eclipses
(F. Lin)

11:00 a m - 11:30 a m

Coffee Break

Session Chair
James McKee

11:30 a m - 11:50 a m

Scintillation of the Double Pulsar (A. Stock)

11:50 a m - 12:10 p m

Probing the Orbit of J0621+1002 Using
New Techniques for Precise Measurement of
Scintillation Arc Curvatures (G. Mall)

12:10 p m - 12:40 p m

Discussion

12:40 p m - 12:50 p m

Closing