SCHEDULE

All times are in MDT (Mountain Daylight Time)!!!!! MDT=UTC-6 hours
Talks were allocated randomly, with constraints given by time zones and known conflicts.
The Zoom info will be communicated before the meeting.

MONDAY, SEPTEMBER 28th 2020

CHAIR: Gian Luca Delzanno
8:00 AM - 8:30 AM MDT:
P. Tenfjord, Interaction of Cold Streaming Protons with the Reconnection Process
8:30 AM - 9:00 AM MDT:
S. Toledo-Redondo, Electrostatic Spacecraft Potential Structure and Wake Formation Effects for Characterization of Cold Ion Beams in the Earth's Magnetosphere
9:00 AM - 9:30 AM MDT:
H. Kolstø, On the Impact of a Streaming Oxygen Population on Collisionless Magnetic Reconnection
9:30 AM – 10:00 AM MDT:
A. Glocer, Modeling advances in modeling the source of near-Earth Plasma
10:00 AM – 10:30 AM MDT:
J. Krall, Does Ring-Current Heating Generate the Cold O+ Shell?

10:30 AM – 11:30 AM MDT:
Discussion. The importance of cold electrons in magnetospheric physics
Moderators: Elena Kronberg and Dennis Gallagher

11:30 AM – 12:00 PM MDT: BREAK

CHAIR: Mike Henderson
12:00 PM – 12:30 PM MDT:
J. Liang, Low-energy plasma structure potentially associated with pulsating auroral patch ----- observational evidence and test-particle simulation
12:30 PM – 1:00 PM MDT:
L. Kistler, The Cold Source of the Warm Plasma Cloak
1:00 PM – 1:30 PM MDT:
K. Takahashi, Magnetoseismic study of mass density and ion composition using spacecraft data
1:30 PM – 2:00 PM MDT:
N. Maruyama, Identifying the Physical Mechanisms to Explain the Extreme Plasmaspheric Erosion for the September 2017 Storm
2:00 PM – 2:30 PM MDT:
S. Baraka, What impact do we expect from kinetic simulation of purely radial IMF orientation on the dayside MP, size and location

TUESDAY, SEPTEMBER 29th 2020

CHAIR: Cecilia Norgren
8:00 AM - 8:30 AM MDT:
S. Spinnangr, On the Micro-Macro Coupling of Mass-Loading in Magnetic Reconnection with Cold Ions
8:30 AM - 9:00 AM MDT:
E. Kronberg, Circulation of ionospheric ions and their impact on the magnetosphere: open questions
9:00 AM - 9:30 AM MDT:
K. Steinvall, A new dissipation mechanism at the reconnecting magnetopause enabled by the presence of cold ions
9:30 AM – 10:00 AM MDT:
M. Hartinger, The effects of cold plasma and the radial Alfven speed profile on magnetospheric ULF wave properties
10:00 AM – 10:30 AM MDT:
M. Liemohn, Geopauses and their relationship to plasmoids

10:30 AM – 11:30 AM MDT:
Discussion. What do we need to know about outflow physics?
Moderators: Vania Jordanova and Joe Borovsky

11:30 AM – 12:00 PM MDT: BREAK

CHAIR: Richard Denton
12:00 PM – 12:30 PM MDT:
M. Henderson, Observations of STEVE-like emissions and potential Generation Mechanism
12:30 PM – 1:00 PM MDT:
J. Lyon, Cold and Warm Plasma Effects on Dayside Reconnection
1:00 PM – 1:30 PM MDT:
B. Larsen, Bayesian model for uncertainty in the HOPE Mass Spectrometer time-of-flight matrix
1:30 PM – 2:00 PM MDT:
J. Goldstein, MMS Observations of Dayside Warm (4 to 100 eV) Ions in the Middle and Outer Magnetosphere
2:00 PM – 2:30 PM MDT:
R. Chappell, An Examination of How Cold Ionospheric Ions Can Act As a Source of Hot Magnetospheric Plasma and Drive the Dynamics of Substorms and Storms

WEDNESDAY, SEPTEMBER 30th 2020

CHAIR: Jean-Francois Ripoll
8:00 AM - 8:30 AM MDT:
D. Kotov, Doubling of NRLMSISE-00 thermosphere hydrogen density: compelling requirement for correct simulations of the entire near-Earth cold plasma environment
8:30 AM - 9:00 AM MDT:
J. Lichtenberger, Whistlers for plasmasphere diagnostic
9:00 AM - 9:30 AM MDT:
M. André, Magnetic reconnection: The effects of cold ionospheric ions
9:30 AM – 10:00 AM MDT:
G.L. Delzanno, Impact of cold electrons on whistler waves
10:00 AM – 10:30 AM MDT:
P. Erickson, Stormtime Cloak Ion Dynamics in the Noontime Sector Adjacent to the Geospace Plume

10:30 AM – 11:30 AM MDT:
Discussion. What would be a good set of cold plasma science targets/challenges for the community?
Moderators: Gian Luca Delzanno and Matina Gkioulidou

11:30 AM – 12:00 PM MDT: BREAK

CHAIR: Mike Hartinger
12:00 PM – 12:30 PM MDT:
J. Goldstein, Warm Ions in the Outer Plasmasphere: A Review
12:30 PM – 1:00 PM MDT:
B. Walsh, Dense Magnetospheric Plasma and Solar Wind-Magnetosphere Coupling
1:00 PM – 1:30 PM MDT:
J.-M. Jahn, The Tail Wagging the Dog: An Analytical Approach to Determining Cold Plasma Ion Density and Composition From Particle Measurements on Electrically Floating Spacecraft
1:30 PM – 2:00 PM MDT:
N. Buzulukova, Interactions between the ring current injections, magnetosonic waves and the plasmasphere
2:00 PM – 2:30 PM MDT:
W. Li, Characteristics of whistler mode waves in the plasmasphere and plumes and their global effects on energetic electron loss in the Earth's inner magnetosphere

THURSDAY, OCTOBER 1st 2020

CHAIR: Mike Liemohn
8:00 AM - 8:30 AM MDT:
D. Han, To infer the cold plasma interacting with the magnetopause reconnection by using the 2-D auroral observations
8:30 AM - 9:00 AM MDT:
C. Norgren, Formation and thermalisation of cold ion beams within the exhaust of magnetic reconnection
9:00 AM - 9:30 AM MDT:
J.-F. Ripoll, On the coupling between the plasma density and whistler-mode waves and its effect on the scattering of radiation belt electrons
9:30 AM – 10:00 AM MDT:
D. Gallagher, The Breathing Plasmasphere
10:00 AM – 10:30 AM MDT:
S. Fuselier, High-density magnetospheric He^+ at the dayside magnetopause and its effect on magnetic reconnection

10:30 AM – 11:30 AM MDT:
Discussion. Measurement concepts: how do we measure cold ion and cold electron distribution functions?
Moderators: Victoria Coffey and Stephen Fuselier

11:30 AM – 12:00 PM MDT: BREAK

CHAIR: Joe Borovsky
12:00 PM – 12:30 PM MDT:
M. Bashir, Inferring the Cold Plasma Composition using EMIC Waves
12:30 PM – 1:00 PM MDT:
T. Nishimura, The role of cold plasma density in whistler-mode wave growth
1:00 PM – 1:30 PM MDT:
R. Sawyer, Low-Energy Magnetospheric Ions Observed by the TRICE 2 Sounding Rocket and the Magnetospheric Multiscale Mission
1:30 PM – 2:00 PM MDT:
M. Adrian, Plasmaspheric Plume Turbulence: Signature of an Electrostatic Corotation-Convection Shear-Layer Instability
2:00 PM – 2:30 PM MDT:
A. Menz, The Effect of Ring Current Heating on Plasmaspheric Ion Composition: Explaining the O+ Torus

FRIDAY, OCTOBER 2nd 2020

CHAIR: Jerry Goldstein
8:00 AM - 8:30 AM MDT:
M. Kim, Analysis of Asymmetric H+ Pitch Angle Distributions Observed by MMS HPCA
8:30 AM - 9:00 AM MDT:
J. Lee, Direct measurements of cold plasma and composition for EMIC wave analysis
9:00 AM - 9:30 AM MDT:
X. Chu, Erosion and refilling of the plasmasphere during geomagnetic storms modeled by a neural network
9:30 AM – 10:00 AM MDT:
R. Denton, Modeling magnetospheric mass density

10:00 AM – 10:30 AM MDT: BREAK

10:30 AM – 11:00 AM MDT:
J. Foster, Energy-Dependent Pitch Angle Distributions of Multi-keV Ions on Plasma Plume Field Lines
11:00 AM – 11:30 AM MDT:
Mei-Yun Lin, The role of molecular ions in the overall ionic composition of polar wind outflow
11:30 AM – 12:00 PM MDT:
J. Borovsky, Charge-Exchange-Byproduct Cold Protons in the Dipolar Magnetosphere

12:00 PM – 1:00 PM MDT:
Discussion. Do we need a dedicated cold-plasma space mission?
Moderators: Mike Henderson and Raluca Ilie