

LWS FST

Pathways of Cold Plasma Through the Magnetosphere

Team Leader: Mei-Ching Fok

Geospace Physics Laboratory, NASA Goddard Space Flight Center

LWS Cold Plasma Team Meeting

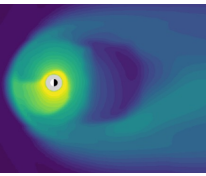
March 23 - 24, 2023



The Goddard Visitor Center: Come In and Explore!



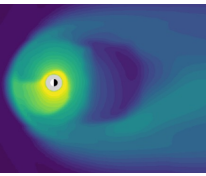
The Teams



- 1. Understanding the Sources, recirculation, and impacts of cold plasma with self-consistent modeling (PI: Mei-Ching Fok, NASA GSFC)**
- 2. Understanding plasmaspheric refilling: an investigation using machine learning models and physics-based simulation (PI: Xiangning Chu, UC Boulder)**
- 3. Midlatitude topside ionospheric variations associated with plasmaspheric erosion and refilling (PI: Phil Erickson, MIT Haystack Observatory)**
- 4. Understanding warm plasma cloak in the magnetosphere (PI: Chih-Ping Wang, UCLA)**
- 5. The source of warm plasma cloak due to ion heating by EMIC waves (PI: Konstantin Gamayunov, Florida Institute of Technology)**



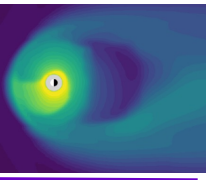
Schedule: Thursday AM



0900-0930am	Introduction and Logistics	Mei-Ching Fok
0930-0945am	LWS Science Program	Simon Plunkett/John McCormack
0945-1015am	Midlatitude topside ionospheric variations associated with plasmaspheric erosion and refilling	Phil Erickson
1015-1045am	Coffee Break	
1045-1115am	Understanding plasmaspheric refilling: an investigation using machine learning models and physics-based simulation	Xiangning Chu
1115-1145am	Understanding warm plasma cloak in the magnetosphere	Chih-Ping Wang
1200-0130pm	Lunch	



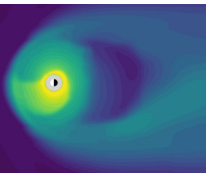
Schedule: Thursday PM



0130-0200pm	The source of warm plasma cloak due to ion heating by EMIC waves	Konstantin Gamayunov
0200-0230pm	Understanding the Sources, Recirculation, and Impacts of Cold Plasma with Self-Consistent Modeling	Mei-Ching Fok
0230-0300pm	Progress in ionospheric variations associated with plasmaspheric erosion and refilling	Phil Erickson
0300-0330pm	Coffee Break	
0330-0400pm	Progress in understanding plasmaspheric refilling using machine learning models and physics-based simulation	Xiangning Chu
0400-0430pm	Progress in understanding warm plasma cloak in the magnetosphere	Chih-Ping Wang
0430-0500pm	Progress in understanding warm plasma cloak due to ion heating by EMIC waves	Konstantin Gamayunov
0630pm	Team Dinner at College Park Grill 8321 Baltimore Ave, Suite B, College Park MD 20740	



Schedule: Friday



0900-0930am	Plasmasphere refilling and erosion during magnetic storms	Joe Huba Cristian Ferradas
0930-1015am	Discussion of team efforts and collaborations	All
1015-1045am	Coffee Break	
1045-1145am	Discussion of team efforts and collaborations	All
1200-0100pm	Lunch	
0100-0300pm	Goddard Tour	
0300-0330pm	Coffee Break	
0330-0500pm	Discussion of team website and next meeting	All
0500pm	Meeting Adjourned	