

# Monday, 12 March 2012

<b>Introduction</b>	8:30-8:45	Welcome/LOC information/Aims of the meeting	
	8:45-9:30	<i>Overview of simulations and observations of the coupling between solar regions</i>	Hansteen
	9:30-10:00	<i>How to exploit current and future instrumentation to understand the coupled solar atmosphere</i>	Tarbell
	10:00-10:45	BREAK	
<b>Physical Models</b>	10:45-11:30	<i>State-of-the-art of single-fluid MHD numerical modeling of the coupled solar atmosphere</i>	Gudiksen
	11:30-12:00	<i>Beyond single fluid MHD: multi-fluid modeling of the coupled solar atmosphere</i>	Khomenko
	12:00-13:30	LUNCH	
	13:30-13:45	Large scale MHD model of the solar corona above time dependent HMI/SDO magnetograms	Bingert
	13:45-14:15	<i>The role of magnetic braiding and MHD wave dynamics in the heating of the Sun's outer atmosphere</i>	van Ballegoijen
	14:15-14:30	Recent results from MRX relevant to reconnection phenomena in solar atmosphere	Yamada
	14:30-16:30	BREAK and POSTER VIEWING	
<b>BR1: Assumptions of Simulations BR2: Strengths and Limitations of Coronal Seismology</b>	16:30-16:45	<i>BR1: Key- or tomb- stones in the bridge from photosphere to corona?</i>	Judge
	16:45-17:00	<i>BR1: The Pros and Cons of 1D vs. 3D Modeling</i>	Klimchuk
	17:00-17:30	BR1: Discussion time	
	16:30-16:45	<i>BR2: What we can and cannot learn from seismology of the solar atmosphere</i>	De Moortel
	16:45-17:00	<i>BR2: What we can and cannot learn from seismology of the solar atmosphere</i>	van Doorselaere
	17:00-17:15	<i>BR2: What we can and cannot learn from seismology of the solar atmosphere</i>	McIntosh
	17:15-17:30	BR2: Discussion time	

## Tuesday, 13 March 2012

<b>Energy Input</b>	8:30-9:15	<i>Observational/Modeling constraints of magneto-convective energy into atmosphere</i>	Cameron
	9:15-9:30	Scaling laws for quiet-sun magnetic fields	Stenflo
	9:30-9:45	Photospheric Magnetic Fields from Magneto-Convection Simulations	Stein
	9:45-10:00	<i>Electric Fields and Poynting Fluxes from Vector Magnetograms</i>	Fisher
	10:00-10:30	BREAK	
	10:30-10:45	Small-scale rotating magnetic flux structures as alternative energy channels into the low corona	Wedemeyer-Boehm
	10:45-11:00	Effects of vortex tube dynamics in the chromosphere	Kitiashvili
<b>Non-LTE diagnostics</b>	11:00-11:30	<i>Graphical introduction to chromospheric line formation</i>	Rutten
	11:30-12:00	<i>State-of-the-art of non-LTE diagnostics: observations and simulations</i>	Carlsson
	12:00-13:30	LUNCH	
	13:30-13:45	The formation of the H $\alpha$ line in the solar chromosphere	Leenaarts
	13:45-14:00	Formation of MgII lines in solar prominences	Heinzel
	14:00-14:15	Spectroscopic Diagnostics with IRIS	Mason
<b>Chromospheric/Coronal spectropolarimetry</b>	14:15-14:45	<i>Inversion tools for chromospheric lines</i>	Asensio-Ramos
	14:45-16:15	BREAK and POSTER VIEWING	
	16:15-16:30	Spectropolarimetry of the photosphere and the chromosphere with IBIS	Kleint
	16:30-16:45	<i>Opportunities and challenges in determining the chromospheric magnetic field using He I 10830</i>	Centeno
	16:45-17:00	<i>Opportunities and challenges in determining the chromospheric magnetic field</i>	Harvey
	17:00-17:15	<i>NLTE inversions from a 3D MHD Chromospheric simulation</i>	de la Cruz Rodriguez
	17:15-17:30	<i>Constraints on coronal magnetic fields from observations of visible and IR emission lines</i>	Tomczyk
	17:30-17:45	Forward modeling of coronal polarization	Rachmeler
17:45-18:00	Observables for Measuring the Outer-Atmospheric Magnetic Field from Chromosphere to Corona	Trujillo Bueno	

## Wednesday, 14 March 2012

**The role of magnetic fields in the coupled solar atmosphere**

8:30-9:00	<i>Magnetic flux emergence into the atmosphere: 3D numerical models</i>	Moreno-Insertis
9:00-9:15	Observational signatures of simulated reconnection in solar photosphere	Danilovic
9:15-9:30	Doppler velocities studied simultaneously in the chromosphere and photosphere of an active region filament	Kuckein
9:30-9:45	Observation, inversion and numerical simulation of single-lobed Stokes V profiles in the quiet sun	Sainz-Dalda
9:45-10:00	Active region emergence sites observed with HMI	Centeno
10:00-10:50	BREAK and POSTER VIEWING	
10:50-11:05	The Prominence/Coronal Cavity Connection: using Hinode, AIA, and IRIS to explore the source of quiet-Sun CMEs	Berger
11:05-11:25	<i>The impact of the chromosphere on magnetic fields: field extrapolations</i>	DeRosa
11:25-11:40	Connecting the photosphere to the corona : Reconstructing the Solar Coronal Magnetic Field	Amari
11:40-11:55	Non-Linear Force-Free Modeling of Solar Corona With The Aid of Coronal Loops	Malanushenko
11:55-12:15	<i>The Impact of the Chromosphere on Numerical Models of the Convection Zone-to-Corona</i>	Abbett
12:15-12:30	Coronal loops with constant cross-section reproduced in 3D MHD models	Peter

12:30	LUNCH and FREE AFTERNOON (VISIT TO MONTEREY AQUARIUM)	
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13:30-14:30	Education and Public Outreach session	
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## Thursday, 15 March 2012

### Energy Transport and Dissipation

8:30-9:00	<i>Observations and modeling of magnetic reconnection in solar atmosphere</i>	Isobe
9:00-9:15	A preliminary study of the HOP-187 jet analysis	Jackson
9:15-9:30	High-resolution observations of type II spicules	Roupepe
9:30-11:00	BREAK and POSTER VIEWING	
11:00-11:30	<i>Observational Evidence of Magnetic Waves in the Solar Atmosphere</i>	McIntosh
11:30-12:00	<i>Coupling, damping and dissipation of magnetic waves in the chromosphere and corona</i>	De Moortel
12:00-12:15	Generation of shock waves traveling from the photosphere to the transition region within network magnetic elements	Kato
12:15-13:45	LUNCH	
13:45-14:15	<i>Beyond single fluid MHD: modeling kinetic effects in the coupled solar atmosphere</i>	Nordlund
14:15-14:45	<i>The mass cycle between the chromosphere and the corona/solar wind</i>	Tian
14:45-15:00	New insight on the coupling of the solar atmosphere from imaging spectroscopy	Reardon
15:00-15:15	Using 3D MHD realistic simulations of the solar corona to test plasma diagnostics	Testa
15:15-15:30	SDO/AIA Observations of Sustained Coronal Condensation and Mass Drainage in Prominences as Return Flows of the Chromosphere-Corona Mass Cycle	Liu
15:30-16:15	BREAK	

### Tutorial: Non-LTE diagnostics made fun!

16:15-16:35	<i>How to calculate non-LTE diagnostics using RH</i>	Uitenbroek
16:35-16:55	<i>How to do 3D radiation, what are the difficulties, and when is it important: parallelization/scaling/multi-grid</i>	Leenaarts
16:55-17:05	<i>Problems with 1D semi-empirical modeling</i>	Uitenbroek
17:05-17:15	<i>NLTE discussion of response functions/contribution functions/formation height</i>	Uitenbroek
17:15-17:30	<i>Basic properties of the Mg II h&amp; k line formation</i>	Leenaarts
20:00	CONFERENCE DINNER	

## Friday, 16 March 2012

### Coupling on large scales and into the solar wind

8:30-9:00	<i>The Role of Topology in the Energetics of the Coupled Solar Atmosphere</i>	Antiochos
9:00-9:15	Topological tools for the analysis of active region filament stability	DeLuca
9:15-9:30	On the importance of Global Events in Destabilizations of the Solar Atmosphere	Title
9:30-10:00	BREAK	
10:00-10:15	Internal vs external reconnection observed by SDO in a newly emerged active region	Regnier
10:15-10:30	Response of the Photospheric Magnetic Field to Flares	H. Wang
10:30-11:00	<i>Global MHD models of the corona and solar wind</i>	Mikic
11:00-11:15	Modeling waves, flows, and instabilities produced by impulsive events in coronal active regions	Ofman
11:15-12:00	Summary talk and/or Discussion: which issues should be addressed in the near future?	Fleck
12:00	END OF MEETING	