



few2013 : Flux Emergence Workshop 2013

15-18 Apr 2013 Nice (France)

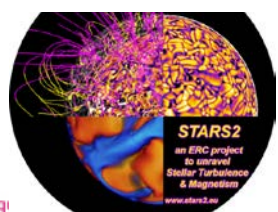
Flux Emergence Workshop 2013

15-18 April 2013, Nice, France

Scientific Program



Laboratoire d'Études Spatiales et d'Instrumentation en Astrophysique



	<u>Sun. 14</u>	<u>Mon. 15</u>	<u>Tue. 16</u>	<u>Wed. 17</u>	<u>Thu. 18</u>
08:00					
		FEW2013 kick off			
09:00		Emergence in the Convection Zone	Flux Emergence and Active Events	Small-Scale Emergence Observed at High Resolution	Flux Emergence and Small-Scale Activity
10:00				Coffee break	
		Coffee break & Registration	Coffee break		Coffee break
11:00		Emergence in the Convection Zone	Flux Emergence and Active Events	Small-Scale Emergence Observed at High Resolution	Energy Build-up in Active Region
12:00			General Discussion	Lunch	General Discussion
13:00		Lunch	Lunch	Tour	Lunch
14:00					
		Flux Emergence and the Dynamo	Flux Emergence and Sunspot Evolution		Flux Emergence and Topology
15:00					
16:00		Coffee break	Coffee break		Coffee break
17:00	Registration	Emergence in the Convection Zone: Flux Emergence and Helicity	Penumbra Formation		Data-Driven Modeling of Emerging Flux and Active Regions
18:00		Cocktail			General discussion and FEW2013 Conclusions
19:00					
20:00					Conference Dinner at the Negresco Hotel
21:00					
22:00					
23:00					

Sunday, April 14, 2013

TIME	EVENT
5:00 pm - 7:00 pm	Registration - Badge Pick-up @ la Maison du Séminaire

Monday, April 15, 2013

TIME	EVENT
8:45 am - 9:00 am	FEW2013 kick off - Bagde Pick-up & Welcome Talks
9:00 am - 10:45 am	Emergence in the Convection Zone - Chairperson : Sacha Brun
09:00 - 09:35	› Buoyant Rise of Active Region Flux Tubes in a Solar-like Convective Envelope - <i>Yuhong Fan, National Center for Atmospheric Research</i>
09:35 - 10:10	› Global dynamics of subsurface active regions - <i>Laurène Jouve, IRAP</i>
10:10 - 10:45	› Multi-parametric study of rising 3D buoyant flux tubes in an adiabatic stratification using AMR - <i>Juan Martinez-Sykora, Lockheed Martin Solar and Astrophysics Laboratory</i>
10:45 am - 11:15 am	Coffee break & Registration
11:15 am - 1:00 pm	Emergence in the Convection Zone - Chairperson : Sacha Brun
11:15 - 11:50	› Flux emergence in the solar global convection calculation with the reduced speed of sound technique. - <i>Hideyuki Hotta, University of Tokyo</i>
11:50 - 12:25	› Probing Emerging Magnetic Flux and the Nature of Detected Pre-emergence Signatures - <i>Stathis Ilonidis, Stanford University</i>
12:25 - 13:00	› Observations of the Magnetic Flux Approaching the Visible Surface - <i>Shin Toriumi, University of Tokyo</i>
1:00 pm - 2:30 pm	Lunch
2:30 pm - 4:15 pm	Flux Emergence and the Dynamo - Chairperson : Yuhong Fan
14:30 - 15:05	› Active Region Emergence, a New Paradigm - <i>Robert Stein, Michigan State University</i>
15:05 - 15:40	› Modeling the Origin of Tilt, Twist, Active Longitudes, and More: Buoyant Loops in Global Convective Dynamos - <i>Nicholas Nelson, University of Colorado</i>
15:40 - 16:15	› Flux emergence in a magnetized convection zone - <i>Rui Pinto, LESIA - Observatoire de Paris & AIM/SAP - CEA Saclay</i>
4:15 pm - 5:00 pm	Coffee break
5:00 pm - 5:20 pm	Emergence in the Convection Zone - Chairperson : Yuhong Fan
17:00 - 17:20	› On the influence of differential rotation on rising magnetic flux tubes - <i>Yori Fournier, Leibniz Institute for Astrophysics</i>

TIME	EVENT
5:20 pm - 6:30 pm	Flux Emergence and Helicity - Chairperson : Yuhong Fan
17:20 - 17:55	› Magnetic helicity properties of emerging active regions determined from longitudinal photospheric magnetograms. - <i>Mariano Poisson, Instituto de Astronomía y Física del Espacio, Facultad de Ciencias Exactas y Naturales</i>
17:55 - 18:30	› Photospheric injection of magnetic helicity during AR 11158 emergence - <i>Kevin Dalmasse, LESIA - Observatoire de Paris</i>
6:30 pm - 7:30 pm	Cocktail

Tuesday, April 16, 2013

TIME	EVENT
9:00 am - 10:45 am	Flux Emergence and Active Events - Chairperson : Lucie Green
09:00 - 09:35	› Collective Solar Behavior - <i>Alan Title, LM Space Astrophysics Laboratory</i>
09:35 - 10:10	› The role of preexisting magnetic environment with newly emerging flux in flares - <i>Brigitte Schmieder, LESIA - Observatoire de Paris</i>
10:10 - 10:45	› Condition for arcade field eruption triggered by a flux emergence event - <i>Takaaki Yokoyama, University of Tokyo</i>
10:45 am - 11:15 am	Coffee break
11:15 am - 12:25 pm	Flux Emergence and Active Events - Chairperson : Lucie Green
11:15 - 11:50	› Structures of Emerging Flux Triggering Solar Eruptions - <i>Kanya Kusano, Solar-Terrestrial Environment Laboratory, Nagoya University</i>
11:50 - 12:25	› Flux emergence and solar eruptive events - <i>Vasilis Archontis, University of St Andrews</i>
12:25 pm - 1:00 pm	General Discussion
12:25 - 13:00	› General Discussion - <i>Sacha Brun, DSM/IRFU/SEDI - CEA Saclay</i>
1:00 pm - 2:30 pm	Lunch
2:30 pm - 4:15 pm	Flux Emergence and Sunspot Evolution - Chairperson : Kanya Kusano
14:30 - 15:05	› The Emergence of an Untwisted Flux Rope - <i>Fang Fang, High Altitude Observatory, National Center for Atmospheric Research</i>
15:05 - 15:40	› MHD waves generated by flux emergence - <i>Alan Hood, University of St Andrews</i>
15:40 - 16:15	› Simulation of a full active region life cycle - <i>Matthias Rempel, National Center for Atmospheric Research</i>
4:15 pm - 4:45 pm	Coffee break

TIME	EVENT
4:45 pm - 5:55 pm	Penumbra Formation - Chairperson : Kanya Kusano
16:45 - 17:20	› Chromospheric Canopy Fields over a Flux Emerging Region as a Key Condition for Formation of the Sunspot Penumbra - <i>Eunhyung Lim, Korea Astronomy and Space Science Institute</i>
17:20 - 17:55	› High resolution spectro-polarimetric observations of the formation of a penumbra - <i>Paolo Romano, INAF - Catania Astrophysical Observatory</i>

Wednesday, April 17, 2013

TIME	EVENT
9:00 am - 10:10 am	Small-Scale Emergence Observed at High Resolution - Chairperson : Viggo Hansteen
09:00 - 09:35	› The Magnetic Flux History of a Quiet-Sun Supergranular Cell - <i>Luis Bellot Rubio, Instituto de Astrofísica de Andalucía-CSIC</i>
09:35 - 10:10	› High resolution analysis of a magnetic bubble emerging through the solar atmosphere - <i>Ada Ortiz Carbonell, Institute of Theoretical Astrophysics</i>
10:10 am - 10:50 am	Coffee break
10:50 am - 12:00 pm	Small-Scale Emergence Observed at High Resolution - Chairperson : Viggo Hanstenn
10:50 - 11:25	› Signatures of small-scale magnetic field emergence as seen from the New Solar Telescope in Big Bear - <i>Vasyl Yurchyshyn, Big Bear Solar Observatory</i>
11:25 - 12:00	› Small-scale flux emergence from the photosphere to the corona - <i>Fernando Moreno-Insertis, Instituto de Astrofísica de Canarias</i>
12:00 pm - 1:15 pm	Lunch
1:15 pm - 6:30 pm	Tour - Mark Chagall tour: Chagall Museum in Nice & visit of St-Paul-de-Vence

Thursday, April 18, 2013

TIME	EVENT
9:00 am - 10:45 am	Flux Emergence and Small-Scale Activity - Chairperson : Laurène Jouve
09:00 - 09:35	› A Detailed Comparison Between The Observed and Synthesized Properties of a Simulated Type II Spicule. - <i>Viggo Hansteen, Institute of Theoretical Astronomy, University of Oslo</i>
09:35 - 10:10	› Recurrent Coronal Jets Induced by Magnetic Emergence - <i>Pascal Démoulin, LESIA - Observatoire de Paris</i>
10:10 - 10:45	› Jets and eruptions following magnetic flux emergence into the corona - <i>Fernando Moreno-Insertis, Instituto de Astrofísica de Canarias</i>

TIME	EVENT
10:45 am - 11:15 am	Coffee break
11:15 am - 12:25 pm	Energy Build-up in Active Region - Chairperson : Laurène Jouve
11:15 - 11:50	› Energy Buildup in Active Regions: A Comparison of AR11158 with a Simulation of Magnetic Flux Emergence - <i>Ward Manchester, Center for Space Environment Modeling, University of Michigan</i>
11:50 - 12:25	› Evolution of electric currents during active region formation - <i>Tibor Torok, Predictive Science Inc.</i>
12:25 pm - 1:00 pm	General Discussion
12:25 - 13:00	› General Discussion - <i>Etienne Pariat, LESIA - Observatoire de Paris</i>
1:00 pm - 2:30 pm	Lunch
2:30 pm - 4:15 pm	Flux Emergence and Topology - Chairperson : Etienne Pariat
14:30 - 15:05	› Magnetic topology, the key to understanding the jets and eruptions following magnetic flux emergence into the corona !? - <i>Klaus Galsgaard, Niels Bohr Institute & University of Copenhagen</i>
15:05 - 15:40	› Time-Dependence of Topological Features of PFSS Models of the Solar Corona - <i>Marc DeRosa, Lockheed Martin Solar and Astrophysics Laboratory</i>
15:40 - 16:15	› Nonlinear force-free extrapolation of emerging flux - <i>Gherardo Valori, LESIA - Observatoire de Paris</i>
4:15 pm - 4:45 pm	Coffee break
4:45 pm - 5:55 pm	Data-Driven Modeling of Emerging Flux and Active Regions - Chairperson : Etienne Pariat
16:45 - 17:20	› Estimating flare's free energy using Poloidal-Toroidal Decomposition method. - <i>Maria Kazachenko, Space Sciences Laboratory</i>
17:20 - 17:55	› A Magnetofrictional Method for Data-driven Simulations of Evolving Solar Coronal Fields - <i>Mark Cheung, Lockheed Martin Solar and Astrophysics Laboratory - DeRosa Marc, Lockheed Martin Solar & Astrophysics Laboratory</i>
5:55 pm - 6:25 pm	General discussion and FEW2013 Conclusions - FEW organizers
8:00 pm - 11:00 pm	Conference Dinner at the Negresco Hotel