

Scientific Event Report

E Research in Astrophysics from Space

E2.1 Solar and Stellar Dynamos and Magnetic Flux Emergence

Main Scientific Organizer *Isik, Emre*

Deputy Organizer *Jiang, Jie*

New Windows on Solar and Stellar Magnetism

Chair: Isik, Emre

Date: Sun, Jul 31, 2016. Room: 3B60

E2.1-0001-16 (WITHDRAWN) 09:30 - 10:00 (solicited)

Continuous Observations of the Sun's Vector Field – A New Window on Solar Magnetism

Hoeksema, J. Todd

E2.1-0002-16 (WITHDRAWN) 10:00 - 10:20

3D Babcock-Leighton Solar Dynamo Models

Miesch, Mark; Hazra, Gopal; Gebreegzabihar, Kinfe; Upton, Lisa; Karak, Bidya Binay

E2.1-0003-16 (WITHDRAWN) 10:20 - 10:40

Evolving Models of Stellar Photospheric and Coronal Magnetic Fields

Cheung, Mark; DeRosa, Marc; Jeffers, Sandra; Beeck, Benjamin

E2.1-0004-16 (WITHDRAWN) 10:40 - 11:00

Modeling the Rise of Fibril Active-Region-Scale Magnetic Fields in Fully Convective Stars

Weber, Maria; Browning, Matthew

Flows and Magnetic Cycles in Solar and Stellar Interiors

Chair: Jiang, Jie

Date: Sun, Jul 31, 2016. Room: 3B60

E2.1-0005-16 (WITHDRAWN) 11:30 - 12:00 (solicited)

Current understanding of solar and stellar interiors

Basu, Sarbani

E2.1-0006-16 (WITHDRAWN) 12:00 - 12:30 (solicited)

Solar Meridional Circulation and Its Temporal Variations from Helioseismology Studies

Zhao, Junwei; Chen, Ruizhu

E2.1-0007-16 12:30 - 12:45

Surface flux transport simulations. Inflows towards active regions and the modulation of the solar cycle.

Martin-Belda, David; Cameron, Robert

E2.1-0008-16 12:45 - 13:00

A deep-seated mechanism for cycle-dependent sunspot group tilt angles

Isik, Emre

Observational Perspectives on Stellar Magnetic Cycles I

Chair: Kovari, Zsolt

Date: Sun, Jul 31, 2016. Room: 3B60

E2.1-0009-16 (WITHDRAWN) 14:00 - 14:30 (solicited)

Observing magnetic cycles on Solar-type stars

Jeffers, Sandra

E2.1-0010-16 (WITHDRAWN) 14:30 - 14:45

Far beyond the Sun: Mapping the magnetic cycle of the young solar-analog iota Horologii

Alvarado-Gómez, Julián David; Hussain, Gaitee; Cohen, Ofer; Sanz-Forcada, Jorge; Stelzer, Beate; Amazo-Gómez, Eliana Maritza; Grunhut, Jason; Drake, Jeremy

E2.1-0011-16 14:45 - 15:00

KIC11560447: An Active Eclipsing Binary From the Kepler Field

Ozavci, Ibrahim; Şenavcı, Hakan Volkan; O'Neal, Douglas; Hussain, Gaitee; Yilmaz, Mesut; Selam, Selim Osman

E2.1-0012-16 (WITHDRAWN) 15:00 - 15:15

The rise time of magnetic flux tubes in a delayed Babcock-Leighton dynamo

Fournier, Yori; Arlt, Rainer

E2.1-0013-16 (WITHDRAWN) 15:15 - 15:30

The cause of the weak solar cycle 24

Jiang, Jie; Cameron, Robert; Schuessler, Manfred

Observational Perspectives on Stellar Magnetic Cycles II

Chair: Jeffers, Sandra

Date: Sun, Jul 31, 2016. Room: 3B60

E2.1-0014-16 (WITHDRAWN) 17:00 - 17:30 (solicited)

Activity cycles from Mount Wilson data: correlations between different types of cycles, activity measures and ages

Kovari, Zsolt

E2.1-0015-16 (WITHDRAWN) 17:30 - 17:45

Stellar magnetic cycles in Kepler-63 and Kepler-17

Valio, Adriana; Estrela, Raissa

E2.1-0016-16 17:45 - 18:00

Stellar activity in selected binary systems with Kepler photometry

Tokbay, Derviş Ersin; Yakut, Kadri

E2.1-0017-16 18:00 - 18:15

Limits of shock heating for the chromospheres of low-gravity stars

Gadelmavla, Diaa

E2.1-0018-16 18:15 - 18:30

Two principal components of solar magnetic field variations and prediction of solar activity on multi-millennium timescale

Zharkova, Valentina; Shepherd, Simon; Popova, Helen; Zharkov, Sergei

Theoretical Understanding of Solar & Stellar Magnetic Cycles

Chair: Rempel, Matthias

Date: Mon, Aug 01, 2016. Room: 3B60

E2.1-0019-16 09:30 - 10:00 (solicited)

The global solar dynamo

Cameron, Robert

E2.1-0020-16 (WITHDRAWN) 10:00 - 10:30 (solicited)

The puzzling dynamo of stars: recent progress with global numerical simulations

Strugarek, Antoine; Charbonneau, Paul

E2.1-0021-16 10:30 - 10:45

Flux Transport Solar Dynamos with Shallow Meridional Flow and Turbulent Pumping

Nandi, Dibyendu; Hazra, Soumitra

E2.1-0022-16 (WITHDRAWN) 10:45 - 11:00

Babcock-Leighton solar dynamo: the role of radial pumping and the equatorward propagation of activity

Karak, Bidya Binay; Cameron, Robert

Small-Scale Fields and Photospheric Activity

Chair: Cheung, Mark

Date: Mon, Aug 01, 2016. Room: 3B60

E2.1-0023-16 (WITHDRAWN) 11:30 - 12:00 (solicited)

Quiet sun magnetism – What does it tell us about the solar dynamo(s)?

Rempel, Matthias; Hotta, Hideyuki

E2.1-0024-16 (WITHDRAWN) 12:00 - 12:15

Is the small-scale magnetic field correlated with the dynamo cycle?

Karak, Bidya Binay; Brandenburg, Axel

E2.1-0025-16 (WITHDRAWN) 12:15 - 12:30

Flux appearance and disappearance rates in the solar internetwork

Gosic, Milan; Bellot Rubio, L. R.; Del Toro Iniesta, Jose Carlos; Orozco Suarez, David; Katsukawa, Yukio

E2.1-0026-16 12:30 - 12:45

The statistical study of global properties of sunspots observed by SoHO/MDI continuum images over solar cycle 23

Goel, Suruchi; Solanki, Sami K.; Krivova, Natalie; Mathew, Shibu K.

E2.1-0027-16 12:45 - 13:00

Rotating plasma jets in the photospheric intergranular lanes

Lemmerer, Birgit; Zaqarashvili, Teimuraz; Hanslmeier, Arnold; Muthsam, Herbert; Piantschitsch, Isabell

Convective Dynamos and Solar/Stellar Flux Emergence

Chair: Cameron, Robert

Date: Tue, Aug 02, 2016. Room: 3B60

E2.1-0028-16 (WITHDRAWN) 09:30 - 10:00 (solicited)

Spontaneous Formation of Surface Magnetic Structure from Dynamo-maintained Magnetic Flux: The Impact of Strong Stratification

Masada, Youhei

E2.1-0029-16 (WITHDRAWN) 10:00 - 10:30 (solicited)

Self-consistent modeling of starspots in global stellar dynamo models

Yadav, Rakesh; Gastine, Thomas; Christensen, Ulrich; Morin, Julien; Reiners, Ansgar; Wolk, Scott; Poppenhaeger, Katja

E2.1-0030-16 (WITHDRAWN) 10:30 - 10:45

Impact of Emerging Flux from L5 Magnetograms on Coronal Magnetic Field Simulations

Weinzierl, Marion; Mackay, Duncan; Yeates, Anthony; Pevtsov, Alexei

E2.1-0031-16 (WITHDRAWN) 10:45 - 11:00

Helicity inversion in spherical convection as a means for equatorward dynamo wave propagation

Duarte, Lucia

Flux Tubes in Solar and Stellar Convection Zones

Chair: Nandi, Dibyendu

Date: Tue, Aug 02, 2016. Room: 3B60

E2.1-0032-16 (WITHDRAWN) 11:30 - 12:00 (solicited)

Emerging flux in solar convective dynamo simulations

Fan, Yuhong

E2.1-0033-16 (WITHDRAWN) 12:00 - 12:30 (solicited)

Helioseismology of emerging active regions

Birch, Aaron

E2.1-0034-16 (WITHDRAWN) 12:30 - 12:45

Predicting solar magnetic activity and its implications for solar dynamo models

Singh, Nishant; Raichur, Harsha; Brandenburg, Axel

E2.1-0035-16 (WITHDRAWN) 12:45 - 13:00

Closing talk / discussion

Miesch, Mark

Poster Program

Author in Attendance: Sunday, 15:30 - 17:00, Poster area: B1 Poster Area

STW = Sunday, Tuesday, Wednesday / TFS = Thursday, Friday, Saturday

STW-302 E2.1-0037-16

Measurements of sunspot group tilt angles for solar cycles 19-24

Isik, Seda; Isik, Emre

STW-303 E2.1-0038-16

A Babcock-Leighton dynamo with stochastic sources

Isik, Emre

STW-305 E2.1-0040-16

Small-Scale Magnetic Field Diagnostics Outside Sunspots Using SOT/Hinode Observations

Botygina, Olga; Lozitsky, Vsevolod

STW-306 E2.1-0041-16

Investigation of relationships between parameters of solar nano-flares and solar activity

Safari, Hossein; Kaki, Bardia; Javaherian, Mohsen

STW-307 E2.1-0042-16

Multi-frequency study of jet in HH 80-81

Pal, Sabyasachi; Patra, Dusmanta; Chakrabarti, Sandip Kumar

Poster Program

Author in Attendance: Tuesday, 15:30 - 17:00, Poster area: B1 Poster Area

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Poster Program

Author in Attendance: Wednesday, 15:30 - 17:00, Poster area: B1 Poster Area

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