First ECLAT Workshop
October 22 – 24, FMI, Helsinki, Finland

Monday, October 22, 14:00 – 18:30

Introduction session

14:30	Welcome and logistics	**K. Kauristie**
14:40	Overall workshop strategy	**H. Opgenoorth**
14:50	ECLAT intro	**S. Milan**
15:15	Status update on OEAW region identification product and event finding activities	**R. Nakamura**
15:45	Solar cycle variation in size of convection pattern	**M. Lester**
16:00	**Coffee break**	
16:30	CAA	**H. Laakso / A. Masson**
17:00	Overview of SuperDARN data-set Initial studies with SuperDARN	**S. Milan**
17:30	MIRACLE meso-scale products, tools and science opportunities	**K. Kauristie / O. Amm**
18:00	GUMICS – a general introduction	**M. Palmroth**
18:30	**Workshop dinner**	

Tuesday, October 23, 09:00 – 18:00

<u>Workshop session 1</u>

09:00   What can I do with SuperDARN coefficients?   **S. Milan**

09:30   Footprint mapping and CAA deliverables of the ECLAT dynamic
G. Facsko, L. Häkkinen, M. Palmroth, I. Honkonen, P. Janhunen
K. Kauristie, S. Milan

09:45   Towards a new data-based magnetospheric   **N. Tsyganenko**
B-field model: Modular structure and first results

10:15   ECLAT results of Cluster footprint mapping   **N. Tsyganenko**
using TS05 and T96 magnetic field models

10:30   **Coffee break**

11:00   Mapping to ionosphere: footpoints deviations   **M. Kubyshkina**
in different models as a result of spacecraft
position and level of activity

11:15   Mapping of field aligned currents in the vicinity
of the cusp between Champ and Cluster
T. Zivkovic, S. Buchert, **H. Opgenoorth**, H. Luehr

11:30   Magnetic reconnection near substorm onset:
Multipoint in situ observations
H. Opgenoorth, T. Zivkovic, K. Ågren, C. Cully, E. Donovan, J. M
Bosqued, A. Fazerkerley, M. Andre, S. Buchert, E. Borälv, E. Lucek

11:45   Testing of updated Substorm Current Wedge   **A. Nikolaev**
model (SCW2L) using ground-based and spacecraft
magnetic observations

12:00   Three proposed event studies for field line mapping
test: localized field-aligned current flow of various
characteristics and intensity
H. Opgenoorth, T. Zivkovic, K. Ågren, O. Amm

12:15   Open discussion on subtopic working groups /
Working group creation and membership distribution

13:00   **Lunch break**

14:00   **Afternoon session:**
Discussion in subgroups and hands-on model
and data sessions

18:00   **Adjourn**

Wednesday October 24, 09:00 – 18:00

<u>Workshop session 2</u>

09:00   Development and distribution of the ECLAT static run library
G. Facsko, E. Gordeev, L. Häkkinen, M. Palmroth, I. Honkonen
P. Janhunen, V. Sergeev, K. Kauristie, S. Milan

09:15   Testing GUMICS against empirical data using   **E. Gordeev**
GUMICS library runs   G. Facsko

09:30   Opportunities to use ECLAT data products   **L. Juusola**
together with the ten year CHAMP statistics

09:45   Sq current characteristics as a side product   **M. van der Kamp**
from ECLAT work

10:00   A new method for oval boundary detection with   **P. Peitso**
active contours: Tests with Polar UVI data

10:15	Use of Isotropy boundaries for mapping accuracy estimates	**V**. **Sergeev**
10:30	Open magnetic flux calculation based on magnetotail observations inside 15 Re	**M.Shukhtina**
10:45	**Coffee break**	
11:15	**Late morning session:** Reports from discussion subgroups and hands-on model and data sessions	
13:00	**Lunch break**	
14:00	**Afternoon session:** Continued discussion in subgroups and hands-on model and data sessions	
16:00	**Coffee break**	
16:30	**Plenary wrap up session:** Summaries by ECLAT board members and comments from the advisory board	
18:00	**Adjourn**	

Discussion/working group themes for Tuesday and Wednesday afternoons

**to be discussed and finaiised on Tuesday before lunch
(see programme)**

a) Tail flux comparisons with IMAGE PC flux and other methods

b) The influence of field aligned currents (substorm current wedge [including Harang discontinuity or region 1 / region 2 sheets]) on magnetospheric mapping

c) Modelling products and their evaluation

d) Possible global configuration of magnetotail/magnetosphere during "strange"/"extreme" events from our boundary region data