

NATO Advanced Study Institute
Sprites, Elves and Intense Lightning Discharges
Corte, Corsica, July 24th-31st, 2004
Scientific Programme

Friday, July 23rd, 2004

18:00-20:00 *Registration*

Saturday, July 24th, 2004

08:00-09:00 *Registration*

Meteorology and lightning:

09:00-09:05 Martin Füllekrug: 'Welcome note'

09:05-10:35 Walt Lyons: 'The meteorology of transient luminous events: An introduction and overview'

10:35-11:00 *Break*

11:00-12:30 Earle Williams: 'The meteorological, microphysical and electrical setting for sprites'

12:30-14:00 *Lunch*

14:30-16:00 Parallel tutorials

Group 1: Walt Lyons

Group 2: Elizabeth Gerken

Group 3: Umran Inan

16:00-16:30 *Break*

16:30-18:00 Parallel tutorials

Group 1: Earle Williams

Group 2: Yukihiro Takahashi

Group 3: Steven Cummer

18:30-20:00 *Ice Breaker*

Sunday, July 25th, 2004

Optical sprite observations:

09:00-10:30 Stephen Mende: 'Frontiers in sprite research and first results from ISUAL'

10:30-11:00 *Break*

11:00-12:30 Colin Price: 'Global lightning activity'

12:30-14:00 *Lunch*

14:30-16:00 Parallel tutorials

Group 1: Stephen Mende

Group 2: Earle Williams

Group 3: Michael Rycroft

16:00-16:30 *Break*

16:30-18:00 Parallel tutorials

Group 1: Michael Rycroft

Group 2: Yasuhide Hobara

Group 3: Victor Pasko

Monday, July 26th, 2004

ULF/ELF/VLF radiation:

09:00-10:30 Umran Inan: 'VLF studies of lightning-induced effects in the ionosphere and the radiation belts'

10:30-11:00 *Break*

11:00-12:30 Steven Cummer: 'Remote measurements of TLE-related lightning parameters from radiated ULF/ELF/VLF fields'

12:30-14:00 *Lunch*

14:00-15:30 Parallel tutorials

Group 1: Umran Inan

Group 2: Eugene Mareev

Group 3: Earle Williams

15:30-16:00 *Break*

16:00-17:30 Parallel tutorials

Group 1: Steven Cummer

Group 2: Dimitry Iudin

Group 3: Yoav Yair: 'Space Shuttle observations of TLEs during the MEIDEX'

17:30-19:00 Torsten Neubert: Practice Course Group 1

Tuesday, July 27th, 2004

Theory and modelling:

09:00-10:30 Michael Rycroft: 'The foundations of research on sprites, elves and intense lightning discharges'

10:30-11:00 *Break*

11:00-12:30 Victor Pasko: 'Theoretical modeling of sprites and jets'

12:30-14:00 *Lunch*

14:00-15:30 Parallel tutorials

Group 1: Elisabeth Blanc

Group 2: Walt Lyons

Group 3: Elizabeth Gerken

15:30-16:00 *Break*

16:00-17:30 Parallel tutorials

Group 1: Victor Pasko

Group 2: Steven Cummer

Group 3: Yukihiro Takahashi

19:00-20:00 *Public lecture.* Elisabeth Blanc: 'Sylphes rouges, jets bleus et elfes: Manifestation d'un couplage intense entre l'atmosphere, l'ionosphere et la magnetosphere'

20:30-22:00 *Reception and workshop dinner*

Wednesday, July 28th, 2004

Meteorology and lightning:

09:00-10:30 Yoav Yair: 'Charge separation processes and the electrification of thunderstorms'

10:30-11:00 *Break*

11:00-12:30 Elisabeth Blanc: 'Sprite observations from the International Space Station'

12:30-14:00 *Lunch*

14:00-15:30 Parallel tutorials

Group 1: Yoav Yair

Group 2: Stephen Mende

Group 3: Craig Rodger

15:30-16:00 *Break*

16:00-17:30 Parallel tutorials

Group 1: Colin Price

Group 2: Craig Rodger

Group 3: Yasuhide Hobara

17:30-19:00 Torsten Neubert: Practice Course Group 2

Thursday, July 29th, 2004

Optical sprite observations:

09:00-10:30 Elizabeth Gerken: 'Telescoping sprites'

10:30-11:00 *Break*

11:00-12:30 Yukihiro Takahashi: 'High speed photometric measurements of sprites and elves'

12:30-14:00 *Lunch*

14:00-15:30 Parallel tutorials

Group 1: Elizabeth Gerken

Group 2: Umran Inan

Group 3: Eugene Mareev

15:30-16:00 *Break*

16:00-17:30 Parallel tutorials

Group 1: Yukihiro Takahashi

Group 2: Elisabeth Blanc

Group 3: Dimitry Iudin

17:30-19:00 Walt Lyons: 'The 100 year hunt for sprites'

19:00-21:00 *Poster viewing*

Friday, July 30th, 2004

ULF/ELF/VLF radiation:

09:00-10:30 Craig Rodger: 'Remote sensing of the upper atmosphere by VLF'

10:30-11:00 *Break*

11:00-12:30 Yasuhide Hobara: 'Locating distant intensive lightning from ELF electromagnetic waves and their characteristics'

12:30-14:00 *Lunch*

14:00-15:30 Parallel tutorials

Group 1: Craig Rodger

Group 2: Michael Rycroft

Group 3: Walt Lyons

15:30-16:00 *Break*

16:00-17:30 Parallel tutorials

Group 1: Yasuhide Hobara

Group 2: Victor Pasko

Group 3: Colin Price

17:30-19:00 Torsten Neubert: Practice Course Group 3

Saturday, July 31st, 2004

Theory and modelling:

08:30-09:45 Eugene Mareev: 'Nonlinear problems in modeling jets, elves and sprites'

09:45-10:15 *Break*

10:15-11:30 Dimitry Iudin: 'Actual problems of thundercloud electrostatics'

11:30-12:30 *Lunch*

12:30-13:45 Parallel tutorials

Group 1: Eugene Mareev

Group 2: Yoav Yair

Group 3: Ute Ebert: 'Streamer discharges in the laboratory'

13:45-14:15 *Break*

14:15-15:30 Parallel tutorials

Group 1: Dimitry Iudin

Group 2: Colin Price

Group 3: Elisabeth Blanc