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ORAL PRESENTATIONS

*Contributions marked with * were presented, but no proceedings paper was submitted.*

Session Ia: Auroral physics and other ionospheric phenomena

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| 7 - 10 | M. J. Kosch, M. T. Rietveld, F. Honary, and T. Hagfors, High Latitude Artificial Aurora from HEATING: A Unique Phenomenon? <i>(Invited)</i> |
| 11 - 14 | E. F. Donovan, B. J. Jackel, R. J. Strangeway, and D. M. Klumpar, Energy Dependence of the Latitude of the 1-25 KeV Ion Isotropy Boundary. |
| * | T. Sergienko, B. Gustavsson, U. Brändström, Å. Steen, and L. Andersson, Study of auroral arc fine structure with conjugate FAST and ALIS measurements. |
| * | S.V. Leontyev, Neutral winds in the E-layer of auroral zone during quiet and disturbed conditions. |
| 15 - 18 | V. Safargaleev, V. Tagirov, and S. Osipenko, Multiple Poleward Propagating Auroral Events in the 15-16 MLT Sector. |
| * | Kozlovsky, A., Characteristics of the Noon Poleward Moving Auroral Arcs Inferred from EISCAT Radar Measurements. |
| 19 - 22 | V.T. Pitkänen, K.U. Kaila, Y. Yaping, and C. Chong, Ground-Based Optical Observations of Dayside Aurora at Zhong Shan Station in Antarctic. |
| * | T. Ulich, E. Turunen, P. Verronen, T. Nygrén, and F. Sedgemore-Schulthess, Modelling of Pulsating Aurora Observed by EISCAT with the Detailed Sodankylä Ion-Neutral Chemistry Model. |
| 23 - 28 | V. R. Tagirov and V. A. Arinin, Optical observations of auroral forms at different zones of high latitudes (review). |
| 29 - 32 | M. Danielides, S. Shalimov, and J. Kangas, Cosmic Radio Noise Absorption Associated with North-South Aurora. |
| * | B. Kozelov and T. Bösinger, Visualization of Physical Processes Related to Combined Electron-Proton Aurorae. Software for Science and Education. |
| 33 - 36 | B. S. Lanchester, M. H. Rees, S. C. Robertson, D. Lummerzheim, M. Galand, M. Mendillo, J. Baumgardner, I. Furniss, and A. D. Aylward, Proton and Electron Precipitation over Svalbard - First Results from a New Imaging Spectrograph (HiTIES). |
| * | U. K. Laine, E. Turunen, J. Manninen, and H. Nevanlinna, Auroral Sounds, Observations and Measurements. |

Session II: Auroral observations monitoring magnetospheric phenomena and Space born studies

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| * | A. Aikio, Electrodynamics of Auroral Arcs. <i>(invited)</i> |
| * | J. Moen, Auroral Signatures of Dayside Boundary Layer Dynamics. <i>(invited)</i> |

- * O. Amm, P. Janhunen, K. Kauristie, H.J. Opgenoorth, T.I. Pulkkinen, and A. Viljanen, Analysis of Auroral Signatures and Electrodynamics of a Pseudobreakup Event, Using Observations of the MIRACLE Network.
- 37 - 40 N. A. Nicholson, E. F. Donovan, B. J. Jackel, L. L. Cogger, and D. Lummerzheim, Multipoint Measurements of the Ion Isotropy Boundary.
- * I.A. Kornilov, T.A. Kornilova, and O. I. Kornilov, Using Image Filtering Methods for TV Data Processing: Subvisual Auroral Wave Structures and Pulsations.
- * G. Starkov, P. Eglitis, M.Uspensky, A. Fabirovsky, B. Kozelov, and K. Kauristie, HF Radar Observations of Auroral Boundaries.
- * K. Kauristie, T. I. Pulkkinen, O. Amm, A. Viljanen, M. Syrjäsuo, P. Janhunen, S. Massetti, S. Orsini, M. Candidi, J. Watermann, E. Donovan, P. Prikryl, P. Eglitis, C. Smith, W. F. Denig, I. Mann, H. J. Opgenoorth, M. Lockwood, M. Dunlop, A. Vaivads, and M. Andre, Ground-Based and Satellite Observations of High-Latitude Auroral Activity in the Dusk Sector of the Auroral Oval.

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- * D. Murtagh, An Overview of the Odin Aeronomy Science Program and First Results. (*invited*)
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- 49 - 53 D.A. Degenstein, E.J. Llewellyn, and N.D. Lloyd, The Potential for Incorrect Interpretation of Atmospheric Images as Seen with OSIRIS.
- * Murtagh D., Early Results from the Sub-MM Radiometer Onboard Odin.

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- * G. W. Leppelmeier, Atmospheric Research on Envisat. (*invited*)
- 55 - 59 C.-F. Enell, K. Stebel, T. Wagner, U. Frieß, K. Pfeilsticker, and U. Platt., Detecting Polar Stratospheric Clouds with Zenith-Looking Photometers.

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- * J. Oldag, J. Höffner, C. Fricke-Begemann, and U. von Zahn, Temperatures and Semidiurnal Tides in The Mesopause Region at 54°N And 28°N Latitude by Potassium Lidar. (*invited*)
- * R. P. Lowe, Gravity Wave Measurements with a Near Infrared Scanning Radiometer at ALOMAR.
- * A. S. Kirillov, Application of Quantum-Chemical Approximations in the Calculation of Rate Coefficients for Intramolecular and Intermolecular Energy Transfer Processes of Atmospheric Gases.

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- * J.J. López-Moreno, M.J. López González, J.F. Gómez, C. Morales, S. Bowyer, J. Edelstein, E.J. Korpela, and M. Lampton, Extreme Ultraviolet Airglow. (*invited*)

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- * G. Witt, IR and Thermal Properties of Mesospheric Particles. (*invited*)
- 69 - 72 G. Sivjee, D. McEwen, and R. Walterscheid, Polar cap Disturbances: Mesosphere and Thermosphere-Ionosphere Response to Solar-Terrestrial Interactions.

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- * P. Janhunen, Inversion of electron fluxes from all-sky images. (*Invited*)
- * V. A. Arinin, and V. R. Tagirov, New Method for Study of Aurora Brightness Spatial Distribution.
- * M.T Syrjäsoo, E.F. Donovan, and L.L. Cogger, Can Computers Understand Auroral Images?
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- * S. Robertson, Development of an Online Field Aligned Support Imager for the ESR.
- 77 - 79 L. P. Borovkov, and S. A. Chernouss, Application of the I-PentaMAX CCD Camera for Auroral Spectrum Observations.
- * M. Gausa, U.-P. Hoppe and G.H. Hansen, DIAL Measurements of Stratospheric Ozone.
- * C.-F. Enell, B. Gustavsson, K. Stebel, U. Blum, U. Brändström, K.-H. Fricke, S. Kirkwood, and Å. Steen, Bistatic Stereoscopia in Studies of Polar Stratospheric Clouds.
- * O. Widell, Ground Based Instrumentation at Esrange.
- 81 - 84 J. R. T. Jussila, H. Holma, and K. U. Kaila, Optical Auroral Instrumentation of University of Oulu.
- 85 - 88 F. Sigernes, T. Svenøe, and C. S. Deehr, OPTICS at the Auroral Station in Adventdalen, Svalbard.

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- 97 - 100 B. J. Jackel, F. Creutzberg, E. F. Donovan, and L. L. Cogger, Triangulation of Auroral Red-Line Emissions Heights.
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- 105 - 108 H. Holma, K. Kaila, and J.R.T. Jussila, Electron Energy Estimations in an Auroral Arc.

- * I.A. Kornilov, Fine Details of Space and Time Structure of Pulsating Aurora and VLF-Chorus Emissions.
- * T.A. Kornilova, I.A. Kornilov, M.I. Pudovkin, O.I. Kornilov, and J. Kultima, Using Image Filtering Methods for TV Data Processing: Subvisual Auroral Wave Structures and Pulsations.
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- * B.V. Kozelov, and T.V. Kozelova, Developing of Auroral Intensification as an Output of Magnetosphere-Ionosphere Dynamical System.
- * V. Safargaleev, S. Osipenko, and V. Tagirov, Azimuthal Propagation of the Auroral Arcs.
- * A.G. Yahnin, I.A. Kornilov, T.A. Kornilova, S.V. Leontyev, L.A. Frank, J.B. Sigwarth, K. Liou, C.-I. Meng, T. Mukai, and S. Kokubun, Auroral Breakup as Observed From Above and Below: Multi-Instrument Case Study.
- * A. J. Oikarinen, Ionospheric heating at Tromsø – Source for Active Space Experiments.
- * G. Milinevsky, M. Leonov, Z. Gritsai, O. Evtushevsky, and I. Katinas, Cloudiness and Divergence Between Ground-Based and Satellite Total Ozone Measurements.
- * G. Milinevsky, M. Leonov, Z. Gritsai, O. Evtushevsky, and V. Kravchenko, The Changes of Total Ozone Over Antarctic Peninsula and Ukraine for 1996-2001.
- * V. C. Roldugin, Invariability of Total Ozone Content Under Solar Proton Events.
- * V. C. Roldugin, and B. A. Tinsley, Changes of Atmospheric Aerosol Density After Earth Transits of the Heliospheric Current Sheet.
- * A. S. Kirillov, The Study of the Role of Collisional Processes in Electronic Kinetics of Singlet and Triplet States of Molecular Nitrogen in High-Latitude Upper and Middle Atmosphere.
- * V. M. Aushev, Y. F. Ashkaliev, G. I. Gordienko, A.I. Pogoreltsev, V. V. Vodyannikov, A. F. Yakovets, and R.H. Wiens, A spectrum of Atmospheric Gravity Waves in the Mesosphere and Thermosphere.
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