# Tähtitieteilijäpäivät ASTRONONERS DAYS 20-22 May 2024, Vaasa

ttseura.fi/ad2024

Astronomical Society

#### **Invited** speakers

Prof. Colin Snodgrass (University of Edinburgh) Dr. Foteini Oikonomou (NTNU, Trondheim) Dr. John Antoniadis (FORTH IA, Crete)

#### **Scientific Organising Committee**

Mélina Poulain (Oulu), chair Mikael Granvik (Helsinki/Luleå) Tuomas Savolainen (Aalto/Metsähovi) Elina Lindfors (Turku) Panagiotis Charalampopoulos (Turku)

#### Local Organising Committee

Riku Rautio (Oulu), chair Karri Koljonen (NTNU, Trondheim) Emma Mannfors (Helsinki) Anne Virkki (Helsinki) Pouya M. Kouch (Turku/Metsähovi) Quentin Salomé (Aalto/FINCA)



Tieteellisten s<mark>eura</mark>in valtuuskunta



# Astronomers' Days 2024 Recap

Astronomers' Days 2024, held from May 20-22 in Vaasa, Finland, stood as the nation's foremost conference on astronomy, bringing together senior and junior Finnish astronomers, along with enthusiasts, to share and discuss cutting-edge research in astronomy and space physics.



## **Organizing Committees**

The event was planned by the Scientific Organizing Committee, chaired by Dr. Mélina Poulain, and included esteemed members Dr. Mikael Granvik, Dr. Tuomas Savolainen, Dr. Elina Lindfors, and Dr. Panagiotis Charalampopoulos. The Local Organizing Committee, consisting of Riku Rautio, Dr. Karri Koljonen, Emma Mannfors, Dr. Anne Virkki, Pouya M. Kouch, and Dr. Quentin Salomé, ensured smooth logistical execution.

### **Invited Speakers and Their Contributions**

The conference featured three prominent keynote speakers:

- **Dr. Foteini Oikinomou** (Norwegian University of Science and Technology) delivered an insightful 45-minute talk on multi-messenger astronomy, covering recent developments regarding high-energy neutrinos, ultra-high-energy cosmic rays, and the significant roles AGNs, GRBs, and TDEs play in high-energy astronomy.
- **Dr. John Antoniadis** (FORTH Institute of Astrophysics, Greece) presented the ARGOS project, focusing on continuous wide-field sky monitoring in the radio band, real-time data alerts, and contributions to understanding dark matter, dark energy, and fast radio bursts.
- **Prof. Colin Snodgrass** (University of Edinburgh) discussed recent advancements in comet research, emphasizing the JWST observations and the upcoming ESA Comet Interceptor mission.

## **Special Sessions**

The conference included several special sessions:

- Metsähovi Radio Observatory 50-Year Anniversary: Dr. Joni Tammi provided an overview, Dr. Tuomas Savolainen introduced a cutting-edge triple-band receiver, and Dr. Derek McKay discussed the observatory's interferometry capabilities.
- **FINCA Session**: Dr. Petri Väisänen highlighted FINCA's role in Finnish astronomy and future plans.
- Nordic Optical Telescope (NOT) Session: Prof. Seppo Mattila reviewed the telescope's scientific contributions and future developments.
- Astronomy Outreach Activities: Dr. Pasi Nurmi discussed public engagement and strategies to inspire future astronomers.
- Annual Meeting of the Finnish Astronomical Society: Members discussed society activities and the goal of organizing a large-scale Nordic astronomy conference.
- Väisälä Prize for the Best PhD Thesis: Prof. Hannu Koskinen awarded Dr. Armin Nabizadeh, who presented his work on observational studies of accreting X-ray pulsars.



## Scientific Talks

A total of 43 science talks, each 15 minutes long, covered a broad spectrum of topics including high-energy astrophysics, transients, galaxies, the Sun and Solar System, stars and the interstellar medium, and gravitational waves.

The detailed program of the conference as well as the titles of the talks are listed at the end of this recap. The abstracts are also listed on our <u>webpage</u>. The slides of AD24 are found <u>here</u>.

#### **Social Programs**

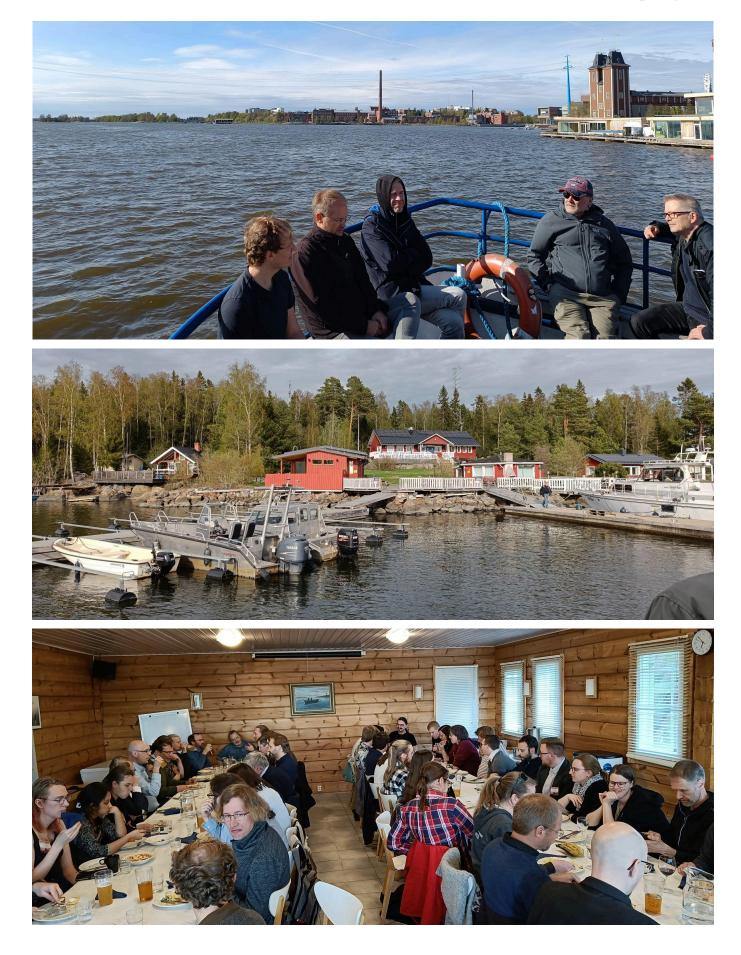
The conference also featured enriching social programs:

• Monday Evening: A visit to Meteoria Söderfjärden, an impressive museum at a meteor impact crater site.





• **Tuesday Evening**: A cruise through the Vaasa archipelago, culminating in the seafood-themed social dinner on one of the thousands of islands of the Vaasa archipelago.



• Wednesday Evening: An outreach talk by Dr. Elina Lindfors at the University of Vaasa, organized with the help of the Kvarken Space Center.



### Conclusion

Astronomers' Days 2024 was a resounding success, fostering collaboration and knowledge exchange among Finnish astronomers and enthusiasts. The conference underscored the dynamic and evolving nature of astronomical research, highlighted significant scientific advancements, and reinforced the importance of continuous engagement and outreach to inspire future generations. With over 60 participants and a wide array of scientific discussions and social activities, the event exemplified the vibrant and collaborative spirit of the Finnish astronomical community.



Pouya Kouch, President of the Finnish Astronomical Society The detailed program of AD24 along with the talk titles are given below. The slides of the AD24 talks are found <u>here</u>.

845       Welcome       9:00       9:00 F. Okonomu       (Initial Colspan="2">Initial Colspan="2">Initial Colspan="2"       9:00 F. Okonomu       (Initial Colspan="2")       Colspan="2">Initial Colspan="2"       Initial Colspan="2"       Colspan="2"       Initial Colspan="2"		Monday - May 20
High-energy astrophysics           9:00         9:00 F: Oknormou (Invited taik)           Chair:         "Multimessenger astronomy with uttra-high-energy cosmic rays and high-energy neutrinos"           Savolainen         9:45 P.M. Kouch — "Are blazars high energy neutrinos"           9:00         10:05 E. Lindfors — "20 years of MaloC Telescopes"           10:15 K. Nilsson — "Precession of the jet of PG 1553+113?"         10:30           0         Coffee break         break           11:00         11:00 T. Hovitata — "Resolving supermassive black hole jets in near-infrared wavelengths"           11:30         11:15 J. Jomanainen — "The Ing 2016 polarisation angle rotation of QJ 287"           Chair:         11:30 A. Bothkova — "Polarimetric properties of the weakly magnetized neutron stars"           Lindfors         11:31 V. Albord — "Polarized X-ray binaries"           12:15         Lunch           13:30         13:30 V. Lotkev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Lotkev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Lotkev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Lotkev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Kravtsov — "Polaint arevavelength review for Metshalovi do bears'dory"		8:15 Registration
9:00     9:00 F. Okonomou (Invite task)       Chair:     "Multimessenger astronomy with ultra-high-energy neutrino factories?"       3avolainen     9:45 P.M. Kouch — "Are blazars high energy neutrino factories?"       10:00 E. Lindors — "20 years of MAGIC Telescopes"       10:00 E. Lindors — "20 years of MAGIC Telescopes"       10:00 E. Lindors — "Precession of the jet of PG 1553+113?"       10:30     Coffee break       High-energy astrophysics       11:00     11:00 T. Hovatta — "Resolving supermassive black hole jets in near-infrared wavelengths"       Chair.     11:15 J. Johnananen — "The long 2016 policitation angle rolation of OJ 287"       Chair.     11:13 O. Bobrikova — "Polarized X-ray reflection from a star"       12:15     12:00 A. Nitindala — "Polarized X-ray reflection from a star"       12:15     Lunch       break     13:30       13:30     13:30 V. Loktev — "Polarizetion Josk Winds in X-ray Binaries"       13:30     13:30 V. Loktev — "Polarizetion Josk winds in X-ray Binaries"       14:00 J. Tammi — "Metsähovi Goyear Special Sessions       13:30     13:30 V. Loktev — "Polarizetion from Accretion Disk Winds in X-ray Binaries"       14:30 J. Tammi — "Metsähovi Goyear Special Session       13:30     13:30 V. Loktev — "Polarizetion Josk around Kerr Black Holes"       13:30     13:30 V. Loktev — "Polarizetion Disk around Kerr Black Holes"       13:30     13:30 V. Loktev — Weblan hovi Solyeard	8:45	Welcome
Invited talk/           Chair:         "Multimessenger astronomy with ultra-high-energy cosmic rays and high-energy neutrinos"           Savolainen         9:45 PM. Kouch		High-energy astrophysics
Chair:       Multimessenger astronomy with ultra-high-energy cosmic rays and high-energy neutrinos"         Savolainen       9:45 P.M. Kouch — "Are bizars high energy neutrino factories?"         10:00 E. Lindfors — "29 year of MAGIC Telescopes"         10:30       Coffee         break       break         High-energy astrophysics       11:00 I. Howata — "Resolving supermassive black hole jets in near-infrared wavelengths"         11:00       11:00 I. Howata — "Resolving supermassive black hole jets in near-infrared wavelengths"         Chair:       11:10 J. Jomanainen — "The long 2016 pointsation angle rotation of OJ 287"         Chair:       11:13 J. An Bebrikova — "Polarimetric properties of the weakly magnetized neutron stars"         Lindfors       11:45 V. Ahiberg — "Polarized X-ray reflection from a star"         12:15       Lunch         I1:30       13:30 V. Lotter — "Polarized X-ray binaries with high-precision polarimetry"         Chair:       High-energy astrophysics & special sessions         13:30       13:30 V. Lotter — "Polarized X-ray binaries with high-precision polarimetry"         Chair:       High-energy astrophysics & special sessions         13:30       13:30 V. Lotter — "Polarized X-ray binaries with high-precision polarimetry"         Chair:       High-energy astrophysics & Special Session         14:30 T. Savolainen — "West 3-band mm-wavelength receiver for MetstahovirRadio Observat	9:00	9:00 F. Oikonomou
Savolainen         9:45 P.M. Kouch — "Are blazars high energy neutrino factories?"           10:00 E. Lindfors — "20 years of MAGIC Telescopes"         10:15 K. Nilsson — "Precession of the jet of PG 1553+113?"           10:30         Coffee break         Lord PG 1553+113?"           10:30         Coffee break         Lord PG 1553+113?"           11:00         11:00 T. Hovatta — "Resolving supermassive black hole jets in near-infrared wavelengths"         11:15           11:00         11:15 J. Jormananen — "The long 2016 polarisation angle rotation of 0.287"         Chair:           11:00         11:145 V. Ahlberg — Polarizethor and the weekly magnetized neutron stars"         Lindfors           11:100         11:145 V. Ahlberg — Polarizethor Disk Winds in X-ray Binaries"         Lindfors           12:15         Lunch         break           Migh-energy astrophysics & special sessions           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"		(Invited talk)
10:00 E. Lindfors — "20 years of MAGIC Telescopes"           10:30         Coffree break           High-energy astrophysics           11:00         11:00 T. Hovatta — "Resolving supermassive black hole jets in near-infrared wavelengths"           11:10         11:10 J. Jornanainen — "The long 2016 polarisation angle rotation of OJ 287"           Chair.         11:30 A. Bobrikova — "Polarimetric properties of the weakly magnetized neutron stars"           Lindfors         11:45 V. Ahiberg — "Polarized X-ray reflection from a star"           12:15         Lunch           Migh-energy astrophysics & special sessions           13:30         13:30 V. Loktev — "Polarimetric properties of the weakly magnetized neutron stars"           Lunch         break           Migh-energy astrophysics & special sessions           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disk Winds in X-ray Binaries"           12:15         Lunch           Migh-energy astrophysics & special sessions           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"           Chair:           Migh-energy astrophysics & special session           Migh-energy astrophysics & special session           Migh-energy astrophysis of Accretion Disk Winds in X-ray Binaries" </td <td>Chair:</td> <td>"Multimessenger astronomy with ultra-high-energy cosmic rays and high-energy neutrinos"</td>	Chair:	"Multimessenger astronomy with ultra-high-energy cosmic rays and high-energy neutrinos"
10:15 K. Nilsson — "Precession of the jet of PG 1553+113?"         10:30         Coffee break         High-energy astrophysics         11:00         11:00         11:00         11:00 T. Hovata — "Resolving supermassive black hole jets in near-infrared wavelengths"         11:10 A. Bobrikova — "Polarized polarisation angle rotation of OJ 287"         Chair:         11:10 A. Bobrikova — "Polarized X-ray reflection from a star"         Lindfors         12:15         High-energy astrophysics & special sessions         13:30 V. Loktev — "Polarized X-ray reflection from a star"         12:15         High-energy astrophysics & special sessions         13:30 V. Loktev — "Polarized is a session         13:30 V. Loktev — "Polarized for any size of Accretion Disk around Kerr Black Holes"         13:30 V. Loktev — "Polarized sessions         13:30 V. Loktev — "Polarized session         High-energy astrophysics & special Session         13:30 V. Loktev — "Polarized is ession         13:30 V. Loktev — "Polarized is ession         14:30 V. Kravtsov — "Polarized vertap, Start observations a	Savolainen	9:45 P.M. Kouch — "Are blazars high energy neutrino factories?"
Instrument         Coffee break           High-energy astrophysics         High-energy astrophysics           11:00         11:00 T. Hovatta — "Resolving supermassive black hole jets in near-infrared wavelengths"           11:10         11:10 T. Hovatta — "Polarinetric properties of the weakly magnetized neutron stars"           Chair:         11:30 A. Bobrikova — "Polarinetric properties of the weakly magnetized neutron stars"           Lindtors         11:45 V. Ahiberg — "Polarized X-ray reflection from a star"           12:15         Lunch           12:16         Lunch           13:30         13:30 V. Loktev — "Polarized X-ray reflection from a star"           13:30         13:30 V. Loktev — "Polarinetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarinetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarinetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarinetric Analysis of Accretion Disks around Kerr Black Holes"           14:00 J. Tammi — "Metsähow Radio Observatory, State of the at observations and hands on training in Finland"           14:00 J. Tammi — "Metsähovi Compact Array, Commissioning a new radio Interferometer"           15:00         Coffee           break         Special session           15:30 S. Mattia — "Nordic Opicial Telescope"		10:00 E. Lindfors — "20 years of MAGIC Telescopes"
break           High-energy astrophysics           11:00         11:00 T. Hovata — "Resolving supermassive black hole jets in near-infrared wavelengths"           11:10         11:00 T. Hovata — "Resolving supermassive black hole jets in near-infrared wavelengths"           Chair:         11:30 A. Bobrikova — "Polarized 7:ary reflection angle rotation of 0J 287"           Chair:         11:30 A. Bobrikova — "Polarized 7:ary reflection from a star"           Lindfors         11:45 V. Ahlberg — "Polarized 7:ary reflection from a star"           12:10 A. Nitindala — "Polarized 7:ary reflection from a star"           12:15         Lunch           break           13:30         13:30 V. Lotker — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"           13:30         13:30 V. Lotker — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"           13:30         13:30 V. Lotker — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"           13:30         13:30 V. Lotker — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"           13:30         13:30 V. Lotker — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"           13:30         13:30 V. Lotker — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"           13:30         13:30 V. Lotker — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"           13:30		10:15 K. Nilsson — "Precession of the jet of PG 1553+113?"
High-energy astrophysics           11:00         11:00 T. Hovatta — "Resolving supermassive black hole jets in near-infrared wavelengths"           11:10         11:10 J. Jormaninen — "The long 2016 polarisation angle rotation of OJ 207"           Chair:         11:30 A. Bobrikova — "Polarimetric properties of the weakly magnetized neutron stars"           Lindfors         11:45 V. Ahilberg — "Polarized X-ray reflection from a star"           12:10 A. Nitindala — "Polarized X-ray reflection from a star"           12:11         Lunch           break	10:30	Coffee
11:00       11:00 T. Hovatta — "Resolving supermassive black hole jets in near-infrared wavelengths"         11:15 J. Jormanainen — "The long 2016 polarization angle rotation of OJ 287"         Chair:       11:30 A. Bobrikova — "Polarized X-ray reflection from a star"         Lindfors       11:45 V. Ahlberg — "Polarized X-ray reflection from a star"         12:00 A. Nitindala — "Polarization from Accretion Disk Winds in X-ray Binaries"         12:15       Lunch         break         13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disk strought Kerr Black Holes"         13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"         13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disk around Kerr Black Holes"         13:30       13:45 V. Kravtsov — "Probing the geometry of X-ray binaries with high-precision polarimetry"         Chair:       Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"         14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"         15:00       Coffee         break       NOT Special Session         16:00       NOT Special Session         16:00       FAS meeting         16:00       FAS meeting         16:00       FAS meeting         16:00       FAS meeting		break
The long 2016 polarisation angle rotation of OJ 287"         Chair:         11:15 J. Jormanainen — "The long 2016 polarisation angle rotation of OJ 287"         Lindfors         11:45 V. Ahlberg — "PolarizetX-ray reflection from a star"         12:00 A. Nitindala — "PolarizetX-ray reflection from a star"         Lunch         Lunch         Unrch         High-energy astrophysics & special sessions         12:15         Lunch         Unrch         High-energy astrophysics & special sessions         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         Chair:         Metsähovi Radio Observatory, State of the at observations and hands on training in Finland"         14:30 J. Tammi — "Metsähovi Compact Array, Commissioning a new radio interferometer"         15:00         Coffee         break         Special sessions & the FAS General meeting         15:30 S.		High-energy astrophysics
Chair:       11:30 A. Bobrikova — "Polarimetric properties of the weakly magnetized neutron stars"         Lindfors       11:45 V. Ahlberg — "Polarized X-ray reflection from a star"         12:15       12:00 A. Nitindala — "Polarized X-ray reflection from a star"         12:15       Lunch         break       break         13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         Chair:       Metsähovi 50 years Special Session         Hovatta       14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"         14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"         14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"         15:00       Coffee         break       NOT Special Session         16:00       FAS meeting         (general meeting       15:30 S. Mattia — "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)       If Ass meeting         17:45       Social event:	11:00	11:00 T. Hovatta — "Resolving supermassive black hole jets in near-infrared wavelengths"
Lindfors         11:45 V. Ahlberg — "Polarized X-ray reflection from a star"           12:00 A. Nitindala — "Polarization from Accretion Disk Winds in X-ray Binaries"           12:15         Lunch break           11:30         High-energy astrophysics & special sessions           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:45 V. Kravtsov — "Probing the geometry of X-ray binaries with high-precision polarimetry"           Chair:         Metsähovi 50 years Special Session           Hovatta         14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"           14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"           14:45 D. McKay — "Metsähovi Compact Array Commissioning a new radio interferometer"           15:00         Coffee           break         NOT Special Session           16:00         FAS meeting           (general assembly)         (general assembly)           17:45         Social event:		11:15 J. Jormanainen — "The long 2016 polarisation angle rotation of OJ 287"
12:00 A. Nitindala — "Polarization from Accretion Disk Winds in X-ray Binaries"         12:15       Lunch break         High-energy astrophysics & special sessions         13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         Chair:         High-energy astrophysics & special session         High-energy astrophysics & special Session         High-energy astrophysics & special Session         Itin:         Chair:         Coffee         Discolspan="2">Special sessions & the FAS General meeting         15:30       Coffee	Chair:	11:30 A. Bobrikova — "Polarimetric properties of the weakly magnetized neutron stars"
12:15       Lunch break         High-energy astrophysics & special sessions         13:30       13:30 V. Loktev - "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30       13:30 V. Loktev - "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30       13:345 V. Kravtsov - "Probing the geometry of X-ray binaries with high-precision polarimetry"         Chair:       Metsähovi 50 years Special Session         Hovatta       14:00 J. Tammi - "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"         14:30 T. Savolainen - "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"         15:00       Coffee         break         Special sessions & the FAS General meeting         15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila - "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)       (general assembly)         Ends at 17:00         17:45       Social event:	Lindfors	11:45 V. Ahlberg — "Polarized X-ray reflection from a star"
break           break           High-energy astrophysics & special sessions           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:45 V. Kravtsov — "Proling the geometry of X-ray binaries with high-precision polarimetry"         Chair:           Metsähovi 50 years Special Session         Metsähovi 70 years Special Session           Hovatta         14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"           14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"         14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"           15:00         Coffee         break           15:00         Special sessions & the FAS General meeting           15:30         NOT Special Session           Chair: Väisänen         15:30 S. Mattila — "Nordic Optical Telescope"           16:00         FAS meeting           (general assembly)         (general assembly)           17:45         Social event:		12:00 A. Nitindala — "Polarization from Accretion Disk Winds in X-ray Binaries"
High-energy astrophysics & special sessions           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:30         13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"           13:45 V. Kravtsov — "Probing the geometry of X-ray binaries with high-precision polarimetry"           Chair:         Metsähovi 50 years Special Session           Hovatta         14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"           14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"           14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"           15:00         Coffee           break         Special session           15:30         NOT Special Session           Chair: Väisänen         15:30 S. Mattila — "Nordic Optical Telescope"           16:00         FAS meeting           (general assembly)         (general assembly)           17:45         Social event:	12:15	Lunch
13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:45 V. Kravtsov — "Probing the geometry of X-ray binaries with high-precision polarimetry"         Chair:       Metsähovi 50 years Special Session         Hovatta       14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"         14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"         14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"         15:00       Coffee         break       NOT Special Session         15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila — "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)       (general assembly)         17:45       Social event:		break
13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:45 V. Kravtsov — "Probing the geometry of X-ray binaries with high-precision polarimetry"         Chair:       Metsähovi 50 years Special Session         Hovatta       14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"         14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"         14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"         15:00       Coffee         break       NOT Special Session         15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila — "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)       (general assembly)         17:45       Social event:		
13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:30       13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"         13:45 V. Kravtsov — "Probing the geometry of X-ray binaries with high-precision polarimetry"         Chair:       Metsähovi 50 years Special Session         Hovatta       14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"         14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"         14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"         15:00       Coffee         break       NOT Special Session         15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila — "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)       (general assembly)         17:45       Social event:		
13:45 V. Kravtsov — "Probing the geometry of X-ray binaries with high-precision polarimetry"         Metsähovi 50 years Special Session         Hovatta       14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"         14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"       14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"         15:00       Coffee       break         Special sessions & the FAS General meeting         15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila — "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)         Ends at 17:00         17:45       Social event:		High-energy astrophysics & special sessions
Chair:       Metsähovi 50 years Special Session         Hovatta       14:00 J. Tammi – "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"         14:30 T. Savolainen – "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"         14:45 D. McKay – "Metsähovi Compact Array, Commissioning a new radio interferometer"         15:00       Coffee         break       Special sessions & the FAS General meeting         15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila – "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)       (general assembly)         17:45       Social event:	13:30	13:30 V. Loktev — "Polarimetric Analysis of Accretion Disks around Kerr Black Holes"
Hovatta       14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"         14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"         14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"         15:00       Coffee         break         15:30       Special sessions & the FAS General meeting         15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila — "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)       (general assembly)         17:45       Social event:		
In the second of the second o	Chair:	Metsähovi 50 years Special Session
14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"         15:00       Coffee         break         Special sessions & the FAS General meeting         15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila — "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)       (general assembly)         17:45       Social event:	Hovatta	14:00 J. Tammi — "Metsähovi Radio Observatory, State of the art observations and hands on training in Finland"
15:00       Coffee break         Special sessions & the FAS General meeting         15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila — "Nordic Optical Telescope"         16:00       FAS meeting (general assembly)         Ends at 17:00         17:45       Social event:		14:30 T. Savolainen — "New 3-band mm-wavelength receiver for MetsähoviRadio Observatory"
break       Special sessions & the FAS General meeting       15:30     NOT Special Session       Chair: Väisänen     15:30 S. Mattila – "Nordic Optical Telescope"       16:00     FAS meeting       (general assembly)       Ends at 17:00       17:45     Social event:		14:45 D. McKay — "Metsähovi Compact Array, Commissioning a new radio interferometer"
Special sessions & the FAS General meeting           15:30         NOT Special Session           Chair: Väisänen         15:30 S. Mattila — "Nordic Optical Telescope"           16:00         FAS meeting           (general assembly)         (general assembly)           17:45         Social event:	15:00	Coffee
15:30       NOT Special Session         Chair: Väisänen       15:30 S. Mattila — "Nordic Optical Telescope"         16:00       FAS meeting         (general assembly)       (general assembly)         Ends at 17:00         17:45       Social event:		break
Chair: Väisänen       15:30 S. Mattila — "Nordic Optical Telescope"         16:00       FAS meeting (general assembly)         Ends at 17:00       Ends at 17:00         17:45       Social event:	•	Special sessions & the FAS General meeting
Initial formula     Fast meeting (general assembly)       Initial formula     Initial formula       Initial formula     Initial formu	15:30	NOT Special Session
(general assembly) Ends at 17:00 17:45 Social event:	Chair: Väisänen	15:30 S. Mattila — "Nordic Optical Telescope"
Ends at 17:00 17:45 Social event:	16:00	FAS meeting
17:45 Social event:		(general assembly)
17:45 Social event:		
17:45 Social event:		
		Ends at 17:00
Söderfjärden impact crater	17:45	Social event:
		Söderfjärden impact crater

#### Tuesday - May 21

	Transients
9:00	9:00 J. Antoniadis
	(Invited talk)
Chair:	"The Array for Gigahertz Observations (ARGOS)"
Charalampopoulos	9:45 T. Killestein — "Driving infant transient discovery with GOTO"
	10:00 K. Koljonen — "The extreme coronal line emitter AT 2022fpx"
	10:15 J. Nättilä — "X-ray precursors from neutron-star mergers"
10:30	Coffee
	break
I	Transients, galaxies & galaxy clusters
11:00	11:00 S. Rosu —
	11:15 C. Humina — "Late-time evolution of the interacting supernova 2017dio"
Chair:	11:30 N. Pyykkinen — "Constrain for the helium layer stripping mechanism from the stripped envelope supernova 2021efd"
Mattila	11:45 T. Sawala — "Measuring the Galactic potential with expanding star clusters"
	12:00 J. Delhomelle — "The Uncertain Merger of our Milky Way and Andromeda"
	12:15 Venhola — "Distribution and properties of dwarfs in nearby galaxy groups and clusters"
12:30	Lunch
	break
	Special sessions & the Väisälä Prize
13:30	FINCA Special Session
	13:30 P. Väisänen — "Finnish Centre for Astronomy with ESO"
Chair:	EPO special session
Johansson	14:00 P. Nurmi — "Astronomy public outreach and promoting astronomy teaching"
	Väisälä prize
	14:30 Prize Winner: A. Nabizadeh — "Observational Studies of Accreting X-Ray Pulsars"
15:00	Coffee
	break
	Galaxies & galaxy clusters
15:30	15:30 R. Rautio — "Modeling the extraplanar diffuse ionized gas in eight galaxies with Cloudy photoionization code"
	15:45 J. Hartke — "Catching the formation of the ultradiffuse galaxy Hydra-UDG32 in the act"
Chair:	16:00 Q. Salomé — "Inefficient jet-induced star formation in Centaurus A: Are shocks regulating star formation in the northern filaments?"
Poulain	16:15 M.B. Stone — "Low-redshift AGN Environments: an observational study"
	16:30 V. Fallah Ramazani — "Distance estimation of BL Lac objects"
	16:45 P. Heinämäki — "Supercluster mass function"
	Ends at 17:00
17:45	Social dinner:
	Archipelago cruise
•	

#### Wednesday - May 22

	Solar System & Sun
9:00	9:00 C. Snodgrass
	(Invited talk)
Chair:	"Recent Results and Future Prospects in Comet Sscience"
Virkki	9:45 M. Granvik — "Tidal disruption of asteroids increases the rate of impacts with the Earth"
	10:00 G. Fedorets — "Characterising very small asteroids as building blocks of the Solar System"
	10:15 A. Penttilä — "Modeling the polarization of the Didymos asteroid system before and after the DART impact"
	10:30 K. Muinonen — "Scattering of light in planetary regoliths using Mueller matrix decomposition"
10:45	Coffee break
	Solar System & Sun
11:10	11:10 A. Virkki — "Planetary Surface Characterization Using Radar Observations"
	11:25 A. Leppälä — "Radiative-Transfer Coherent-Backscattering Modelling for Polarimetric Phase Curves of Galilean Satellites"
Chair:	11:40 V. Björn — "Mercury Regolith Modelling Using Messenger Spectrophotometry"
Granvik	11:55 M. Vuori — "Deriving the complex refractive index of an acoustically levitated Mercury analogue particle using laboratory measurement
	12:10 D. Weigt — "A novel technique to predict magnetic flux emergence on the Sun"
	12:25 S. Kivistö — "Almost 50 years of Metsähovi Solar Observations on 37 GHz with recovered digitised historical maps"
12:40	Lunch
	break
	Gravitational waves & supermassive binary BHs
13:35	13:35 P. Johansson — "Resolving the complex dynamical evolution of SMBH in cosmological simulations using the KETJU code"
Chair:	13:50 A. Keitaanranta — "Supermassive black hole dynamics with KETJU and a dynamical friction subgrid model"
Tammi	14:05 A. Rawlings — "The Stochastic Nature of SMBH Binary Eccentricity"
	14:20 T. Minkkinen — "Detecting a gravitational wave background from early universe phase transitions with LISA"
14:35	Coffee
	break
	Stars & interstellar medium
15:00	15:00 A. Haris — "Spot Transits in Kepler and TESS Photometry of Late Main-Sequence Stars"
Chair:	15:15 E. Mannfors — "Cloud evolution in the high-energy molecular ring λ Orionis"
Sawala	15:30 J. Vorster — "VLBI Observations of Water Masers During the Accretion Burst in a High-Mass Protostellar Cluster"
	Ends at 15:45

18:00

Outreach event at University of Vaasa: E. Lindfors — "Jännittävät mustat aukot"