

J-P Metsävainio

Artistic Curriculum Vitae

Astronomical Photographer and Visual Artist

Oulu, Finland

+358 40 826 7863 jp@jiipee.art www.jiipee.art

Professional Profile

J-P Metsävainio is a Finnish astronomical photographer and visual artist based in Oulu. He has photographed deep-sky objects from his own observatory for approximately 30 years. His work begins with astronomical light captured through long exposures and draws on astronomical knowledge. He is known for long-term Milky Way mosaics and for transforming his astronomical photographs into stereoscopic 3D visualisations. His work connects visual art, astronomical observation and public engagement.

Areas of Expertise

- Long-exposure and narrowband astronomical photography, including tone-mapping techniques
- Large-scale mosaic imaging and image processing
- Stereoscopic and three-dimensional interpretation of astronomical images
- Astronomical visualisation for exhibitions, publications and public engagement
- Large-scale photographic works and exhibition installations

Current Position and Professional Practice

2006–present Independent Visual Artist and Astronomical Photographer

Independent professional practice based in Oulu, Finland; working full-time as an artist and photographer since 2008. Current professional activity is presented through JiiPee.art.

1999–present Photography and Visual Art

Development of an independent practice centred on astronomical imaging, visual interpretation and exhibition work.

1992–present Independent Design Studio

Product and environmental design. Selected work includes pillar-style letterboxes for Finland's national postal service, Posti, and outdoor furniture and lighting for Finnish companies.

1990s–present User Interface Design

Design of interfaces for consumer devices.

Selected Publications and Books

2026 Islands in Infinity, Geoscientist 36 (1), pp. 48–51

Article by Brian May, Derek Ward-Thompson and J-P Metsävainio. DOI 10.1144/geosci2026-009.

2025 Islands in Infinity: Galaxies 3-D, London Stereoscopic Company

Book created with Professor Derek Ward-Thompson and Sir Brian May. Metsävainio supplied the astronomical imagery and created the scientifically informed stereoscopic transformations of galaxies. ISBN 978-1-8381645-6-0.

2020 Cosmic Clouds 3-D: Where Stars Are Born, London Stereoscopic Company

A book by David J. Eicher and Sir Brian May, with 3-D images by J-P Metsävainio. ISBN 978-1-9996674-7-4.

Scientific and Academic Use of Work

2015 Reference in The Astronomy and Astrophysics Review

Dubner, G. and Giacani, E. Radio Emission from Supernova Remnants. The Astronomy and Astrophysics Review 23, article 3. The article references Metsävainio's three-dimensional visualisation of the Veil Nebula as an example of projection effects in supernova-remnant morphology. DOI 10.1007/s00159-015-0083-5.

2009–present Narrowband Tone Mapping Method

Developed and documented a workflow for separating chrominance and luminance information in narrowband astronomical image processing. The method has been shared through tutorials and invited lectures.

Invited Lectures and Conference Presentations

2027 European AstroFest, London, United Kingdom (*forthcoming*)

Invited lecture: Light in the Darkness: Astrophotography under the Northern Sky. Kensington Conference and Events Centre.

2026 Royal Astronomical Society, United Kingdom (*forthcoming*)

Invited lecture: Secrets of an Astrophotographer: How a Click of the Camera Can Reveal the Hidden Beauty of the Cosmos.

2026 European AstroFest, London, United Kingdom

Invited speaker in two conference sessions at Kensington Conference and Events Centre.

2019 39th Meeting of the Polish Astronomical Society, Olsztyn, Poland

Invited lecture: Astro-stereography: Creating 3D Astronomical Images.

2019, 2013, 2011 Central European Deepsky Imaging Conference (CEDIC), Linz, Austria

Invited speaker at three editions of the international conference on astrophotography and deep-sky imaging.

2016, 2014, 2009 Northeast Astro-Imaging Conference and Northeast Astronomy Forum (NEAIC/NEAF), Suffern, New York, USA

Invited speaker at three editions of the astronomy and space-imaging event.

2015 9th Panhellenic Conference of Amateur Astronomy, Sparta, Greece

Invited speaker on astrophotography.

International Jury and Expert Roles

2026–2027 Appointed Judge, RASroPhoto, Royal Astronomical Society, United Kingdom

One of five named expert judges for the international photography competition marking the bicentenary of Monthly Notices of the Royal Astronomical Society (MNRAS). Entries are assessed for technique, composition, aesthetics and storytelling.

Selected International Collaborations and Institutional Presentations

2025 Professor Derek Ward-Thompson and Sir Brian May, United Kingdom

Collaboration on Islands in Infinity: Galaxies 3-D, combining astronomical photography, astrophysical interpretation and stereoscopic visualisation.

2020 Sir Brian May and David J. Eicher, United Kingdom and United States

Collaboration on Cosmic Clouds 3-D: Where Stars Are Born, based on Metsävainio's nebula imagery and three-dimensional transformations.

2020 Science Museum, London, United Kingdom

Participation in the international launch and presentation of Cosmic Clouds 3-D with Sir Brian May and David J. Eicher.

Royal Observatory Greenwich, United Kingdom

Astronomical imagery and stereoscopic presentations used in public exhibitions and audience engagement.

Selected Artistic Projects

2026 Beyond the Sky, Oulu Symphony Orchestra, Ouluhalli, Oulu (*forthcoming*)

A planned immersive audiovisual work combining Metsävainio's astronomical imagery with music by composer Lauri Porra and a live performance by the Oulu Symphony Orchestra conducted by Dalia Stasevska. The images will be presented on a monumental curved screen as part of the Oulu2026 cultural programme and the Lumo Light Festival.

2008–2026 Northern Milky Way

An eighteen-year Milky Way mosaic based on approximately 2,200 hours of exposure and about 400 individual image fields. The work spans 145 degrees of sky from Cygnus to Orion and has a digital resolution of approximately 8.6 gigapixels. An eight-metre exhibition version was unveiled in Oulu in 2026.

2025 Space Cube Sculpture, Oulu Art Museum

A commissioned mirrored sculpture creating the perception of an infinite section of space.

2024 Lux Aeterna – Eternal Light, Hämeenlinna Church

An audiovisual collaboration in which Metsävainio's astronomical imagery was projected inside the church for a choral concert.

2021 The Voices of Apollo 11

An audiovisual work based on the Apollo 11 lunar mission.

Exhibitions and Public Presentations

- 2027** Hyvinkää Art Museum, Hyvinkää, Finland (*forthcoming*)
- 2026–2028** Astronomers Take Over, National Maritime Museum, Greenwich, London
Metsävainio's imagery appears in the interactive Galaxy Box section with Sir Brian May.
- 2026** Vanhaa valoa, Mäntinranta Art Centre, Tampere, Finland
- 2026** Nocturne, Galleria G12, Helsinki, Finland
- 2025** Vanhaa valoa, Varikkogalleria, Seinäjoki, Finland
- 2024** Nocturne, AudioGalleria, Oulu, Finland
- 2023** Joulugalleria, Galleria MABD, Oulu, Finland
- 2022** First Art Exhibition of Taidetalo Kulttuuripankki, Oulu, Finland
- 2022** Clear Skies, Galleria MABD, Oulu, Finland
- 2021** Night Fever, The Platform Gallery, Helsinki, Finland
- 2020** Per aspera ad astra, Galleria MABD, Oulu, Finland
- 2019** Astronomical Nature Photographs, Galleria Kajaste, Helsinki, Finland
- 2019** Astronomical Photography Exhibition, Q-Galleria, Tampere, Finland
- 2018** Vanhaa valoa, Galleria MABD, Oulu, Finland
- 2016** Mikkeli Centre of Photography, Mikkeli, Finland
- 2016** 3D3, Finlayson Art Area, Tampere, Finland
Group exhibition with Einari Hyvönen and Jaakko Mattila.
- 2016, 2013** Ars Electronica Center, Linz, Austria
- 2015** Uusi Muoto, with Christelle Mas and Anni Arffman, Oulu, Finland
- 2015** Per Aspera ad Astra, Galleria Kajaste, Helsinki, Finland
- 2015** Astronomical Photography Exhibition, Galleria Kajaste, Oulu, Finland
- 2014** Joulun Tähdet, Pakkahuoneenkatu 10, Oulu, Finland
- 2013** AIC Photography Exhibition, Santa Clara, California, USA
- 2013** Photography Exhibition, Sardinia, Italy
- 2012** Moving the Still, Wynwood, Miami, USA
- 2012** Oulu Art Museum, Oulu, Finland
- 2012** J-P Metsävainio and Esa Jormakka, Terveystalo/ODL, Oulu, Finland
- 2012** Dimensioita – Kuvia taiteen pimeältä puolelta, Liminka School of Art, Liminka, Finland
- 2012** Multimedia Works, Hotel Lasaretti, Oulu, Finland

Public and Site-Specific Works

- 2025** Koti universumissa (At Home in the Universe), Oulu Art Museum, Oulu, Finland
A portable art cabinet commissioned for Oulu day-care centres, creating an enclosed viewing space that presents an immersive universe.
- 2016** Central Cygnus, Luova Laboratorio (Creative Laboratory), Oulu, Finland
Photographic canvas print with an aluminium frame, approximately 100 × 400 centimetres.
- 2015** Tuhatuotista laulumusiikkia (A Thousand Years of Sung Music), Oulu and Rovaniemi, Finland
Astronomical image projections created for concerts with the vocal ensembles Cappella pro Vocale and Punctum at St Thomas Church, Oulu, and Korkalovaara Chapel, Rovaniemi.
- 2014** Tuhatuotista laulumusiikkia (A Thousand Years of Sung Music), St Thomas Church, Oulu, Finland
Astronomical imagery projected across the church walls and ceiling for a concert collaboration with the vocal ensemble Cappella pro Vocale.
- 2014** Cirrus of Cygnus, Educational Consortium OSAO, Haukipudas, Finland
Photographic work on aluminium, over 10 × 3 metres.
- 2014** Path of Swans, Oulu Swedish School, Finland
Photographic work on aluminium, approximately 3.6 × 1.6–1.7 metres.

Awards and Recognition

2025 Amateur Photographer Editors' Selection

Technical editor Andy Westlake selected Metsävainio's NGC 1365 image for The Best Photos of 2025. The image appears in Islands in Infinity: Galaxies 3-D.

2008–2023 NASA Astronomy Picture of the Day

Twenty images selected for NASA's Astronomy Picture of the Day.

2014 Astronomy Photographer of the Year, Royal Observatory Greenwich

Highly Commended, a third-place distinction in the Deep Space category, for Veil Nebula Detail (IC 1340). The international competition received approximately 2,500 entries from 51 countries.

2013 Best Scientific Photographs, BuzzFeed selection

2012 Best Astronomical Images, selected by astronomer Phil Plait

2009 Stella Arcti Award, Ursa Astronomical Association

Awarded for significant astronomical work.

Works in Collections, Image Libraries and Public Sites

Smithsonian Institution, United States

Royal Observatory Greenwich, United Kingdom

National Geographic, United States

NASA, United States

Vatican Observatory, Vatican City

Science Photo Library, London, United Kingdom

YellowKorner, France

Oulu Art Museum, Finland

Tampere Art Museum, Finland

City of Tampere, Finland

Educational Consortium OSAO, Finland

Oulu Swedish School, Finland

Education

Architecture Studies, University of Oulu, Finland

1984–1986 Fine Art Studies, Liminka School of Art

1983 Finnish Matriculation Examination

International Publication and Distribution

Metsävainio's images and projects have been published, selected or presented by NASA, National Geographic, Smithsonian Magazine, CNN, Forbes, Newsweek, Discover, Ciel & Espace, PetaPixel, My Modern Met and EarthSky. His images have been distributed internationally through Science Photo Library and YellowKorner.

Selected Media Coverage

2026 MTV3 Viiden jälkeen

Astrokuvaaja J-P Metsävainio kuvaa mykistävän upeita tähtitaivaskuvia, television interview.

2026 Yle

Oululainen astrokuvaaja sai kansainvälistä tunnustusta.

2025 Amateur Photographer

The Best Photos of 2025.

2025 PetaPixel

Astronomical Photographer Captures His 'Best Photo' Yet of Tadpole Nebula After Decades of Attempts.

2024 PetaPixel

This Astrophotographer Captures the Universe Unlike Anyone Else.

2024 My Modern Met

Visual Artist Shares Beauty of Universe with Detailed Astrophotography.

2024 Arto Nyberg, Yle
Television interview about Metsävainio's artistic practice.

2022 Suomen Kuvalehti
Kaikkeuden kuvaaja.

Selected Media Coverage, continued

2021 CNN
Finnish Astrophotographer Creates Milky Way Mosaic.

2021 Forbes
Compare This Epic Amateur Astronomy Composite With Our Best Space Telescopes.

2021 Smithsonian Magazine
See Astonishing Milky Way Mosaic Image That Took 12 Years to Create.

2021 Newsweek
Photographer Spent 12 Years Making This Massive Image of the Milky Way.

2021 My Modern Met
Astrophotographer Combined 12 Years of Milky Way Images Into One Giant 'Grand Mosaic'.

2021 EarthSky
Astronomy Art: Voices of Apollo 11.

2021 PetaPixel
Photographer Spends 12 Years, 1,250 Hours, Exposing Photo of Milky Way.

2021 PetaPixel
Astrophotographer Turns His Space Photos Into Kaleidoscopic Artworks.

2021 PetaPixel
Astrophotographer Creates 3D Views of His Space Photos.

2021 Yle
Tältä näyttää 20 miljoonaa tähteä – suomalainen astrokuvaaja kerää maailmalta hehkutusta mosaiikkikuvallaan, jonka tekeminen kesti 12 vuotta.

2021 Tähdet ja avaruus
Suomalaisen tähtikuvaajan maailmanennätys meni uusiksi.

2021 Space.com
Wow! This Incredible Image of the Milky Way Took 12 Years to Create.

2021 ScienceAlert
A Photographer Spent 12 Years Making This Milky Way Pic. It Will Crush Your Tiny Heart.

2021 Business Insider
A Stunning Image of the Milky Way Took 12 Years to Photograph. It Shows the Ghost of a Supernova.

2020 MTV Uutiset
Feature on Metsävainio's astronomical photography.

2020 Yle
Coverage of Cosmic Clouds 3-D and the collaboration with Sir Brian May.

2020 Ilta-Sanomat
Coverage of Cosmic Clouds 3-D and Metsävainio's astronomical imagery.

Membership

Member, Ursa Astronomical Association, Finland

Online Portfolio and Supporting Material

Website: www.jiipee.art

Astro Anarchy blog and observing journal: astroanarchy.blogspot.com

Image archive: astroanarchy.zenfolio.com

Instagram: [instagram.com/metsavainiojp](https://www.instagram.com/metsavainiojp)

Facebook: [facebook.com/astroanarchy](https://www.facebook.com/astroanarchy)

Video demonstration of three-dimensional astronomical imaging: [youtube.com/watch?v=uUbYXArhNqw](https://www.youtube.com/watch?v=uUbYXArhNqw)