



SEPPO JALMARI LAINE

CURRICULUM VITAE

Spitzer Science Center, Mail Code 314-6
California Institute of Technology
Pasadena, CA 91125
USA
Citizenship: USA, Finland

Phone: (626) 395-5727
Home: (626) 765-9142
Fax: (626) 568-0673
Email: seppo@ipac.caltech.edu
URL: <http://web.ipac.caltech.edu/staff/seppo/>

Research and Professional Interests:

Galaxy structure, evolution and dynamics, specifically galactic bars, mergers and galaxy accretion events; radio astronomy, infrared astronomy, space observatories, multiwavelength analyses.

Employment:

Sep. 2002–present

Research Scientist (Staff Scientist until Feb 2005), **Spitzer Science Center**, California Institute of Technology, Pasadena, California, USA.

Main duties: Perform independent research with space-based and ground-based instruments, including analysis of data from the *Spitzer Space Telescope*, write scientific papers, attend scientific meetings, provide user support to the worldwide astronomical community in the use of *Spitzer*, specifically the IRAC near- to mid-infrared camera, be the curator of IRAC documentation, help the Spitzer proposal review process, provide user support at astronomy meetings, lead the assembly of the WFIRST simulation repository, act as a science center liaison to WFIRST working groups and WFIRST science investigation teams.

Aug. 2000–Aug 2002

Post-doctoral Research Fellow, **Space Telescope Science Institute**, Baltimore, Maryland, USA. Supervisor: Dr. Roeland van der Marel. Main duties: Reducing astronomical data from the *Hubble Space Telescope*, collaborating with people in the institute, writing scientific papers.

Aug. 1999–Aug. 2000

Post-doctoral Research Assistant in astronomy, Department of Physics and Astronomy, **University of Kentucky**, Lexington, Kentucky, USA. Supervisor: Prof. Isaac Shlosman. Main duties: Reducing astronomical data from the *Hubble Space Telescope*, supporting projects in the department, writing scientific papers.

Jan. 1997–Aug. 1999

Post-doctoral Research Assistant in astronomy, Department of Physical Sciences, **University of Hertfordshire**, Hatfield, U.K. Supervisor: Dr. Johan Knapen. Main duties: Writing observing proposals, reducing astronomical data, supporting projects in the department, writing scientific papers.

Aug. 1990–Dec. 1996	Graduate student at University of Florida , Gainesville, Florida, USA. Worked also as a teaching assistant, duties included teaching and supervising undergraduate astronomy laboratory work. Financed also by several grants from Finnish agencies, including the Finnish Culture Fund, and Academy of Finland.
Jan. 1989–May 1989; Aug. 1989–Jul. 1990	Research Assistant in the quasar project of the University of Turku (Grant from the Academy of Finland).
Summer 1989	Research Assistant in the research group of astronomical optics at the University of Turku (Grant from the Center for the Advancement of Technology, Finland).
Education:	
December 21, 1996	Ph.D. in astronomy, University of Florida, U.S.A., supervisor Prof. S. T. Gottesman Title: “ <i>Observations and Modeling of the Gas Dynamics of the Barred Spiral Galaxy NGC 7479</i> ”
May 1990	M.Sc. in astronomy, University of Turku, Finland, supervisor Prof. Mauri Valtonen Title: “ <i>Investigation of the Coma Cluster of Galaxies with Computer Simulations</i> ”
Publications:	54 publications in refereed astronomical journals, including 18 first author publications, and 78 other astronomy publications (appended). The number of entries from my work in the Astrophysics Data System (ADS) is 155, with about 4,250 total citations.
Awards and Scholarships:	
2002–2016	Recipient of numerous NASA group achievement awards as a member of the Spitzer team
2009	Awarded 23.1 hours of observing time with IRAC/ <i>Spitzer Space Telescope</i> , as the Principal Investigator, with \$34,650 of funding. Title “Spitzer/IRAC Study of Stellar Streams Around Nearby Galaxies”
2005	Awarded 0.9 hours of observing time with IRAC/ <i>Spitzer Space Telescope</i> , as the Principal Investigator, with \$7,958 of funding. Title “Resolving the Controversy about the Anomalous Arms in NGC 4258”
2003	Awarded NASA Long Term Space Astrophysics grant (five years), as a Co-Investigator (PI Shardha Jogee U. Texas), with \$558,539 of funding. Title “Structure and Dynamics of Local and Intermediate Redshift Disks”

2001	Awarded 11 orbits of observing time with NICMOS/ <i>Hubble Space Telescope</i> , as the Principal Investigator, with \$86,414 of associated funding for data reduction and analysis.
1994,1995,1996	Awarded DSR Graduate Student Research Assistantship (University of Florida; \$7,000, \$7,000, \$7,000)
1995	Awarded Academy of Finland Stipend for graduate studies at the University of Florida (\$7,500)
1991,1992	Awarded Finnish Academy of Science Scholarship (\$2,000, \$2,000)
1991,1992	Awarded Finnish Cultural Fund Scholarship (\$10,000, \$10,000)
1991,1992	Awarded Niilo Alho's Scholarship for a Finn studying in the U.S.A. (\$3,000, \$3,600)
1990	Awarded Teaching Assistantship at the University of Florida (\$7,000)
1990	Awarded CLAS Russell Fellowship at the University of Florida (\$1,000)
1990	Awarded Wihuri Fund Scholarship (Finland; \$2,000)
1990	Awarded G Wulff's Research Fund Astronomy Prize at the University of Turku (\$500)
1990	Awarded Turku Finnish University Association Scholarship (\$1,000)
Memberships:	Member of American Astronomical Society (since 1991), International Astronomical Union (since 2015), Royal Astronomical Society (1997–1999), Phi Beta Kappa (since 1997), S4G <i>Spitzer</i> Exploration Science Team (2010–)
Community Service and Outreach	
2016–	Member of AAS Dannie Heineman Prize for Astrophysics Committee
1999–	Assistant with Several <i>Spitzer Space Telescope</i> Outreach Events in the Greater Los Angeles Area
1999–	Referee, Astrophysical Journal, Astronomy & Astrophysics, Monthly Notices of the Royal Astronomical Society
2003	Panelist, Chandra X-ray Telescope Peer Review Panel
2002, 2003	Advisor, NASA Extragalactic Theory Panel

Supervision:

Supervised graduate students and undergraduate students at the STScI and *Spitzer* Science Center, supervised a data analyst at *Spitzer* Science Center

Language skills:

English, German, Swedish, Finnish and some Spanish

References:

Dr. Lisa Storrie-Lombardi
California Institute of Technology
Spitzer Science Center, Mail Code 314-6
1200 East California Boulevard
Pasadena, CA 91125, U.S.A.
Tel. +1-626-395-8665
Fax +1-626-432-7484
email:lisa@ipac.caltech.edu

Prof. Johan Knapen
Instituto de Astrofísica de Canarias
Calle Vía Láctea, S/N
E-38200 La Laguna, Tenerife
Tel. +34-922-605244
Fax +34-922-605210
E-mail: jhk@iac.es

Dr. Roeland van der Marel
Space Telescope Science Institute
3700 San Martin Drive
Baltimore, MD 21218
Tel. +1-410-338-4931
Fax +1-410-338-4767
Email: marel@stsci.edu

Use of Ground-Based Telescopes

European Very Long Baseline Interferometry Network (EVN), Europe, May 2008 and June 2014, to image the nucleus of the barred spiral galaxy NGC 7479 as Principal Investigator

5.0m Palomar Hale Telescope in California, USA, June 2009, using the Double Spectrograph to take optical spectra of low-redshift BL Lac host galaxies as Principal Investigator

0.9m optical telescope in Cerro Tololo, Chile, April 2002, using the broad band B, V and I filters to image satellite galaxies as Principal Investigator

JKT optical telescope on La Palma, March 1999, using the broad band and H α filters to image barred starburst galaxies as Co-Investigator

UKIRT near-infrared telescope on Mauna Kea, September 1998, using IRCAM Fabry-Perot to map the central regions of seven Seyfert/starburst galaxies in Br γ and H $_2$ 1–0 S(1) emission as Co-Investigator

MERLIN array of telescopes in England, January 1998, to map the radio continuum in the nucleus of NGC 7479 as Principal Investigator

Green Bank 140 ft radio telescope in West Virginia, November 1997, observing 21 cm hydrogen emission from shell galaxies as Co-Investigator

CFHT telescope on Mauna Kea, March 1997, using the adaptive optics and MONICA near-infrared camera to take images of the central regions of Seyferts and starburst galaxies as Co-Investigator

OVRO mm interferometer in California, January 1995, mapping of CO in the barred spiral NGC 7479 as Principal Investigator

VLA radio telescope in New Mexico, August 1994, June 1995 mapping 21 cm hydrogen emission as Principal Investigator; several runs mapping the radio continuum during 1996–1999 as Principal Investigator; several runs mapping the radio continuum in ten nearby Seyfert/starburst galaxies during 1999–2000 as Principal Investigator.

FCRAO telescope in Massachusetts, May–June 1992, January 1993 and March 1993, mapping CO in barred spiral galaxies, as Co-Investigator

JCMT telescope in Hawaii, Aug. 1991, observations of T Tauri stars as Co-Investigator

SEST telescope in Chile (funded by the Academy of Finland), Dec. 26 1990 – Jan. 3 1991, radio continuum observations of QSOs at 90 GHz, as Co-Investigator

Metsähovi radio telescope in Finland, several observing runs 1989-1990, radio continuum observations of QSOs at 22 and 37 GHz, as Co-Investigator

Computer Skills:

Experienced user of Linux, UNIX, MacOS and VMS operating systems, familiar with Windows

Programming languages: Fortran, Pascal, Basic, C, PERL, Python

Experienced user of major astronomical software packages (GIPSY, AIPS, IRAF, Vista, IDL)

**Participation in
Scientific Meetings:**

I have presented dozens of talks and posters (both invited and contributed) at various institutions and international conferences over the course of my career. I presented talks or posters in most of the following meetings. I was also a member of the Local Organizing Committee in some of these meetings, as noted.

Community Astrophysics with WFIRST: Guest Observer and Archival Science, Pasadena, CA, February - March 2016

American Astronomical Society Meeting, Kissimmee, FL, January 2016

Division for Planetary Sciences Meeting, National Harbor, MD, November 2015

International Astronomical Union General Assembly, Honolulu, HI, August 2015

Mocking the Universe Workshop, Baltimore, MD, July 2015

American Astronomical Society Meeting, Seattle, WA, January 2015

Wide-field InfraRed Surveys: Science and Techniques, Pasadena, CA November 2014

American Astronomical Society Meeting, Boston, MA, June 2014

American Astronomical Society Meeting, Indianapolis, IN, June 2013

Infrared and Submillimeter Probes of Gas in Galaxies: From the Milky Way to the Distant Universe, Pasadena, CA, March 2013

American Astronomical Society Meeting, Long Beach, CA, January 2013

The Magellanic System: In Perspective Workshop, Perth, Australia, September 2012

American Astronomical Society Meeting, Austin, TX, January 2012

American Astronomical Society Meeting, Boston, MA, May 2011

Stormy Cosmos: The Evolving ISM from Spitzer to Herschel and Beyond, Pasadena, CA, November 2010

American Astronomical Society Meeting, Miami, FL, May 2010

American Astronomical Society Meeting, Washington, DC, January 2010

Reionization to Exoplanets: Spitzer's Growing Legacy, Pasadena, CA, October 2001, member of Local Organizing Committee

American Astronomical Society Meeting, Pasadena, CA, June 2009

American Astronomical Society Meeting, Long Beach, CA, January 2009

American Astronomical Society Meeting, Austin, TX, January 2008

Formation and Evolution of Galaxy Disks, Rome, Italy, October 2007

The Evolving ISM in the Milky Way and Nearby Galaxies: Recycling in the Nearby Universe, Pasadena, CA, December 2007, member of Local Organizing Committee

American Astronomical Society Meeting, Seattle, WA, January 2007

American Astronomical Society Meeting, Washington, DC, January 2006

Infrared Diagnostics of Galaxy Evolution, Pasadena, CA, November 2005, member of Local Organizing Committee

American Astronomical Society Meeting, San Diego, CA, January 2005

The Environments of Galaxies: from kpc to Mpc, Chania, Crete, Greece, August 2004

American Astronomical Society Meeting, Denver, CO, May–June 2004

American Astronomical Society Meeting, Atlanta, GA, January 2004

Astrophysics of Dust, Estes Park, Colorado, May 2003

American Astronomical Society Meeting, Seattle, WA, January 2003

Coevolution of Black Holes and Galaxies, A Carnegie Observatories Centennial Symposium, Pasadena, CA, October 2002

American Astronomical Society Meeting, Washington, D.C., January 2002

Structure and Formation of Giant Elliptical Galaxies, A Max Planck Society sponsored workshop in Ringberg Castle, Germany, November 2001

American Astronomical Society Meeting, Pasadena, California, June 2001

The Central Kpc of Starbursts and AGN: the La Palma Connection, Santa Cruz, La Palma, Canary Islands, Spain, May 2001

American Astronomical Society Meeting, San Diego, California, Jan 2001

American Astronomical Society Meeting, Atlanta, Georgia, Jan 2000

IAU Colloquium 174 on Small Galaxy Groups, Turku, Finland, June 1999

American Astronomical Society Meeting, Austin, Texas, Jan 1999

The Evolution of Galaxies on Cosmological Timescales, Puerto de la Cruz, Tenerife, Canary Islands, Spain, Nov–Dec 1998

Galaxy Dynamics, Rutgers University, New Jersey, Aug 1998

American Astronomical Society Meeting, Washington, D.C., Jan 1998

National Astronomy Meeting, Southampton, Apr 1997

American Astronomical Society meeting, San Antonio, Texas, Jan 1996

IAU Colloquium 157 on Barred Galaxies, Tuscaloosa, Alabama, May–June 1995

American Astronomical Society meeting, Tucson, Arizona, Jan 1995

Winter School in Infrared Astronomy, Tenerife, Canary Islands, Spain, Dec 1992

American Astronomical Society meeting, Atlanta, Georgia, Jan 1992

Summer research course in radio astronomy, Otaniemi, Espoo, Aug 1989

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List of publications

Publications in refereed journals

1. **Laine**, S., et al.
“Metallicity and Age of the Stellar Stream around the Disk Galaxy NGC 5907”
Astronomical Journal, 152, 72 (2016)
2. Ingalls, J. G., ..., **Laine**, S., et al.
“Repeatability and Accuracy of Exoplanet Eclipse Depths Measured with Post-cryogenic Spitzer”
Astronomical Journal, 152, 44 (2016)
3. Rafiei Ravandi, M., ..., **Laine**, S., et al.
“The extended disc and halo of the Andromeda galaxy observed with Spitzer-IRAC”
Monthly Notices of the Royal Astronomical Society, 459, 1403 (2016)
4. Pannuti, T. G., Swartz, D. A., **Laine**, S., et al.
“Chandra and Very Large Array Observations of the Nearby Sd Galaxy NGC 45”
Astronomical Journal, 150, 91 (2015)
5. Salo, H., ..., **Laine**, S., et al.
“The Spitzer Survey of Stellar Structure in Galaxies (S⁴G): Multi-component Decomposition Strategies and Data Release”
Astrophysical Journal Supplement Series, 219, 4 (2015)
6. Muñoz–Mateos, J. C., ..., **Laine**, S., et al.
“Stellar Masses, Sizes And Surface Photometry in the Spitzer Survey of Stellar Structure in Galaxies (S⁴G)”
Astrophysical Journal Supplement Series, 219, 3 (2015)
7. Cheung, E., ..., **Laine**, S., et al.
“Galaxy Zoo: Are bars responsible for the feeding of active galactic nuclei at $0.2 < z < 1.0$?”
Monthly Notices of the Royal Astronomical Society, 447, 506 (2015)
8. **Laine**, S., et al.
“Spitzer/IRAC Near-Infrared Features in the Outer Parts of S⁴G Galaxies”
Monthly Notices of the Royal Astronomical Society, 444, 3015 (2014)
9. Holwerda, B. W., ...**Laine**, S., ...
“Morphological Parameters of Spitzer Survey of Stellar Structure in Galaxies”
Astrophys. J., 781, 12 (2014)
10. McCollum, B., **Laine**, S., et al.
“The Optical and Infrared Photometric Evolution of the Recent Stellar Merger, V1309 Sco”
Astronomical J., 147, 11 (2014)

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11. Kannappan, S. J., ..., **Laine**, S., ...
“The Gas-Richness Threshold Mass Is Not The Bimodality Mass: Refueling Transitions And The Rise And Fall Of Bulged Spiral Galaxies”
Astrophys. J., 777, 42 (2013)
 12. Zaritsky, D., ..., **Laine**, S., ...
“On the Origin of Lopsidedness in Galaxies as Determined from the Spitzer Survey of Stellar Structure in Galaxies (S⁴G)”
Astrophys. J., 772, 135 (2013)
 13. Galvin, T. J., ..., **Laine**, S.
“Radio-Continuum Study of the Nearby Sculptor Group Galaxies. Part 1: NGC 300 at $\lambda=20$ cm”
Astrophysics and Space Science, 340, 133 (2012)
 14. Moffett, A. J., Kannappan, S. J., Baker, A. J., **Laine**, S.
“A High Frequency of Extended UV Disks in Low-Mass E/S0 Galaxies and Its Relation to Disk Building”
Astrophys. J., 745, 34 (2012)
 15. Haan, S., Armus, L., **Laine**, S., ...
“Spitzer IRS Spectral Mapping of the Toomre Sequence: Spatial Variations of PAH, Gas, and Dust Properties in Nearby Major Mergers”
Astrophys. J. Suppl., 197, 27 (2011)
 16. Rebull, L. M., ..., **Laine**, S., ...
“New Young Star Candidates in CG4 and Sa101”
Astronomical J., 142, 25 (2011)
 17. Wei, L. H., Vogel, S. N., Kannappan, S. J., Baker, A. J., Stark, D. V., **Laine**, S.
“The Relationship Between Molecular Gas and Star Formation in Low-Mass E/S0 Galaxies”
Astrophys. J. Letters, 725, L62 (2010)
 18. **Laine**, S., Krause, M., Tabatabaei, F., Siopis, C.
“Lack of Interaction between the Dust Grains and the Anomalous Radio Jet in the Nearby Spiral Galaxy NGC 4258”
Astronomical J., 140, 1084 (2010)
 19. **Laine**, S., Appleton, P. N., Gottesman, S. T., Ashby, M. L. N., Garland, C. A.
“Warm Molecular Hydrogen Emission in Normal Edge-On Galaxies NGC 4565 and NGC 5907”
Astronomical Journal, 140, 753 (2010)
 20. **Laine**, S., Beck, R.
“Radio Continuum Jet in NGC 7479”
Astrophysical J., 673, 128 (2008)

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21. Bridge, C. R., Appleton, P. N., Conselice, C. J., Choi, P. I., Armus, L., Fadda, D. T., **Laine**, S., Marleau, F. R., Carlberg, R. G., Helou, G., and L. Yan
“The Role of Galaxy Interactions and Mergers in Star Formation at $z < 1.3$: Mid-Infrared Properties in the Spitzer First Look Survey”
Astrophysical J., 659, 931 (2007)
 22. Leon, S., Eckart, A., **Laine**, S., Kotilainen, J. K., Schinnerer, E., Lee, S.-W., Krips, M., Reunanen, J., and Scharwächter, J.
“Nuclear Starburst-Driven Evolution of the Central Region in NGC 6764”
Astronomy & Astrophysics, 473, 747 (2007)
 23. Rossa, J., **Laine**, S., van der Marel, R. P., Hibbard, J. E., Mihos, J. C., Böker, T., and Zabludoff, A. I.
“The Toomre Sequence Revisited with HST/NICMOS: Nuclear Brightness Profiles and Colors of Interacting and Merging Galaxies”
Astronomical J., 134, 2124 (2007)
 24. **Laine**, S., Kotilainen, J. K., Reunanen, J., Ryder, S. D., Beck, R.
“Examining the Seyfert-Starburst Connection with Arcsecond-Resolution Radio Continuum Observations”
Astronomical J., 131, 701 (2006)
 25. Frayer, D. T., ..., **Laine**, S., ...
“Spitzer 70 and 160 μ m Observations of the Extragalactic First Look Survey”
Astronomical J., 131, 250 (2006)
 26. Lacy, M., ..., **Laine**, S., ...
“The Infrared Array Camera Component of the Spitzer Space Telescope Extragalactic First Look Survey”
Astrophysical J. Supplement, 161, 41 (2005)
 27. Jogee, S., ..., **Laine**, S., ...
“Bar Evolution over the Last 8 Billion Years: A Constant Fraction of Strong Bars in the GEMS Survey”
Astrophysical J. Letters, 615, 105 (2004)
 28. **Laine**, S., Valtonen, M. J., Zheng, J.-Q.
“Improved Models for the Evolution of the Coma Cluster of Galaxies”
Astronomical J., 127, 765 (2004)
 29. **Laine**, S., van der Marel, R. P., Rossa, J., Böker, T., Mihos, J. C., Hibbard, J. E., Zabludoff, A. I.
“Hubble Space Telescope/WFPC2 Investigation of the Nuclear Morphology in the Toomre Sequence of Merging Galaxies”
Astronomical J., 126, 2717 (2003)

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30. **Laine**, S., van der Marel, R. P., Lauer, T. R.; Postman, M., O’Dea, C. P., Owen, F. N.
“Hubble Space Telescope Imaging of Brightest Cluster Galaxies”
Astronomical J., 125, 478 (2003)
 31. Knapen, J. H., Pérez-Ramírez, D., **Laine**, S.
“Circumnuclear Regions in Barred Spiral Galaxies - II. Relations to Host Galaxies”
Monthly Notices of the Royal Astronomical Society, 337, 808 (2002)
 32. Lauer, T. R.,...,**Laine**, S.,...
“Galaxies with a Central Minimum in Stellar Luminosity Density”
Astronomical J., 124, 1975 (2002)
 33. Jogee, S., Shlosman, I., **Laine**, S., Englmaier, P., Knapen, J. H., Scoville, N. Z., Wilson, C. D.
“Gas Dynamics in NGC 5248: Fueling a Circumnuclear Starburst Ring of Super Star Clusters”
Astrophys. J., 575, 156 (2002)
 34. Jogee, S., Knapen, J. H., **Laine**, S., Shlosman, I., Scoville, N. Z., Englmaier, P.
“Discovery and Implications of a New Large-Scale Stellar Bar in NGC 5248”
Astrophys. J. Letters, 570, L55 (2002)
 35. Böker, T., **Laine**, S., van der Marel, R. P., Rix, H.–W., Sarzi, M., Ho, L. C., Shields, J. C.
“An HST Census of Nuclear Star Clusters in Late-Type Spiral Galaxies: I. Observations and Image Analysis”
Astronomical J., 123, 1389 (2002)
 36. **Laine**, S., Shlosman, I., Knapen, J. H., Peletier, R. F.
“Nested and Single Bars in Seyfert and Non-Seyfert Galaxies”
Astrophys. J., 567, 97 (2002)
 37. **Laine**, S.
“NGC 7479 – a Case Study”
Astrophysics and Space Science, 276, 667 (2001)
 38. **Laine**, S., Knapen, J. H., Pérez-Ramírez, D., Doyon, R., Nadeau, D.
“Grand-Design Spirals in the Core of NGC 5248”
Astrophysics and Space Science, 276, 475 (2001)
 39. Pérez-Ramírez, D., Knapen, J. H., **Laine**, S. “Circumnuclear Regions and their Barred Host Galaxies” *Astrophysics and Space Science*, 276, 625 (2001)
 40. Kotilainen, J. K., Reunanen, J., **Laine**, S., Ryder, S. D.
“Near-infrared line imaging of the starburst galaxies NGC 520, NGC 1614 and NGC 7714”
Astronomy and Astrophysics, 366, 439 (2001)
 41. **Laine**, S., Knapen, J. H., Pérez-Ramírez, D., Englmaier, P., Matthias, M.
“Circumnuclear kinematics in NGC 5248: the origin of nuclear spiral arms”
Monthly Notices of the Royal Astronomical Society, 324, 891 (2001)

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42. Pérez-Ramírez, D., Knapen, J. H., Peletier, R. F., **Laine**, S., Doyon, R., Nadeau, D.
“Circumnuclear Regions in Barred Spiral Galaxies I. Near-Infrared Imaging”
Monthly Notices of the Royal Astronomical Society, 317, 234 (2000)
 43. Kotilainen, J. K., Reunanen, J., **Laine**, S., Ryder, S. D.
“Near-Infrared Line Imaging of the Circumnuclear Starburst Rings in the Active Galaxies
NGC 1097 and NGC 6574”
Astronomy and Astrophysics, 353, 834 (2000)
 44. Reunanen, J., Kotilainen, J. K., **Laine**, S., Ryder, S. D.
“Near-Infrared Line Imaging of the Circumnuclear Starburst Ring in NGC 7771”
Astrophys. J., 529, 853 (2000)
 45. **Laine**, S. and Heller, C. H.
“A Minor Merger Model for NGC 7479”
Monthly Notices of the Royal Astronomical Society, 308, 557 (1999)
 46. **Laine**, S., Gottesman, S. T., Kenney, J. D. P., Yun, M. S.
“CO Distribution and Kinematics Along the Bar in the Strongly Barred Spiral NGC 7479”
Astrophys. J., 511, 709 (1999)
 47. Knapen, J. H., **Laine**, S., Relano, M.
“Circumnuclear Star-Forming Regions in Barred Galaxies”
Astrop. & Space Sci., 269, 605 (1999)
 48. Kotilainen, J. K., Reunanen, J., **Laine**, S., Ryder, S. D.
“Near-Infrared Line Imaging of Circumnuclear Star Formation in Nearby Active Galaxies”
Astrop. & Space Sci., 269, 605 (1999)
 49. **Laine**, S., Knapen, J. H., Pérez-Ramírez, D., Doyon, R., Nadeau, D.
“A Nuclear Grand-Design Spiral Within the Normal Disk Spiral of NGC 5248”
Monthly Notices of the Royal Astronomical Society, 302, L33 (1999)
 50. **Laine**, S., Shlosman, I., Heller, C. H.
“Pattern Speed of the Stellar Bar in NGC 7479”
Monthly Notices of the Royal Astronomical Society, 297, 1052 (1998)
 51. **Laine**, S. and Gottesman, S. T.
“Neutral Hydrogen Gas Distribution and Kinematics in NGC 7479”
Monthly Notices of the Royal Astronomical Society, 297, 1041 (1998)
 52. Knapen, J. H., **Laine**, S., Yates, J., Robinson, A., Richards, A.M.S., Doyon, R., Nadeau, D.
“Resolved Structure in the Nuclear Region of the Ultraluminous Infrared Galaxy Markarian
273”
Astrophys. J. Letters, 490, L29 (1997)

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53. Tornikoski, M., Valtaoja, E., Teräsranata, H., Karlamaa, K., Lainela, M., Nilsson, K., Kotilainen, J., **Laine**, S., Lähteenmäki, A., Knee, L. B. G., Botti, L. C. L.
“SEST Observations of Extragalactic Radio Sources at 3 mm and 1.3 mm”
Astronomy & Astrophys. Suppl. Series, 116, 157 (1996)
 54. Teräsranata H., Tornikoski M., Valtaoja E., Urpo S., Nesterov N., Lainela M., Kotilainen J., Wiren S., **Laine** S., Nilsson K., Valtonen M.
“Ten Years Monitoring of Extragalactic Radio Sources at 22, 37 and 87 GHz”
Astronomy & Astrophys. Suppl. Series, 94, 121 (1992)

Conference proceedings and published abstracts

1. **Laine**, S., et al.
“Imaging of NGC 5907’s stellar stream”
Proceedings of the International Astronomical Union, IAU Symposium, Volume 317, pp. 324-325 (2016)
2. **Laine**, S., et al.
“Color Index Imaging of the Stellar Stream Around NGC 5907”
IAU General Assembly, Meeting #29, id.2258146 (2015)
3. Ingalls, J. G., Krick, J., Carey, S., Grillmair, C. J., Lowrance, P., Glaccum, W. **Laine**, S., Surace, J. A.
“Kernel Regression Techniques for Enhancing Spitzer Photometric Precision”
IAU General Assembly, Meeting #29, id.2257999 (2015)
4. Härmänen, J., McCollum, B., **Laine**, S. Rottler, L., Bruhweiler, F.
“Near-IR photometry of the proposed stellar merger M31N 2015-01a”
The Astronomer’s Telegram, No.7595 (2015)
5. Rafiei Ravandi, M., Barmby, P., Ashby, M., Davidge, T., **Laine**, S. J., Zhang, J.
“Extending the Surface Brightness Profile of the Andromeda Galaxy Using Spitzer-IRAC Observations”
American Astron. Soc. Meeting #225, #446.03 (2015)
6. Cheung, E., ..., **Laine**, **S.**, et al.
“Galaxy Zoo: Are Bars Responsible for the Feeding of Active Galactic Nuclei at $0.2 < z < 1.0$?”
American Astron. Soc. Meeting #225, #426.01 (2015)
7. **Laine**, **S.**, et al.
“Color Index Imaging of the Stellar Stream Around NGC 5907”
American Astron. Soc. Meeting #225, #250.18 (2015)
8. **Laine**, **S.**, S⁴G Team
“Spitzer/IRAC Near-Infrared Features in the Outer Parts of S⁴G Galaxies”
American Astron. Soc. Meeting #221, #352.22 (2013)

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