

# Curriculum Vitae

Name: Dr. Michihiro Takami

Date and place of birth: 12 May 1970, Saitama, Japan

Citizenship: Japan

## Academic qualifications

- Bachelor in Science (Astronomy), March 1993, University of Tokyo (Japan)
- Master of Science (Astronomy), March 1995, University of Tokyo (Japan).  
Supervisor: Dr. Masuo Tanaka.  
Title: Development of a near-infrared spectrograph at the NAOJ 1.5-m telescope.
- Ph.D. in Astronomy, March 1998, University of Tokyo (Japan).  
Supervisor: Dr. Masuo Tanaka.  
Title: Development of the near-infrared Fabry-Perot imager "MUSE" and imaging observations of H<sub>2</sub>, [Fe II] and He I lines around massive stars.

## Current Position

Associate Research Fellow, Institute of Astronomy and Astrophysics, Academia Sinica (March 2014-).

## Previous Positions

- July 2007 - March 2014:  
Assistant Research Fellow, Institute of Astronomy and Astrophysics, Academia Sinica
- August 2004 - July 2007:  
Support Astronomer (Adaptive Optics), Subaru Telescope.
- December 1998 - August 2004:  
Postdoctoral Research Assistant at the Department of Physical Sciences, University of Hertfordshire.
- April - November 1998:  
Postdoctoral Fellow at the Laboratory for Earthquake Chemistry, Graduate School of Science, University of Tokyo

## Language

Mother Tongue: Japanese.

High level of proficiency in English, both written and spoken.

Basic level of proficiency in Mandarin (Taiwan dialect), both written and spoken.

## Invited Talks

- "Studies of Exoplanets and Solar Systems using SPICA: An Overview" (Review talk)  
Conference Title: SPICA Science Conference 2013  
Date: 6/18-21/2013  
Venue: University of Tokyo, Tokyo, Japan  
Sponsor: JAXA, Japan
- "Studies of Exoplanets and Solar Systems using SPICA: An Overview" (Review talk)  
Conference Title: Annual Meeting of Astronomical Society of Japan: SPICA Session  
Date: 9/21/2012  
Venue: University of Ooita, Ooita, Japan  
Sponsor: JAXA, Japan
- "Extended IR Emission Associated with Protostars: Views from Spitzer IRAC"  
Conference Title: Star Formation Workshop 2010  
Date: 11/24-25/2010  
Venue: NAOJ, Tokyo, Japan  
Sponsor: NAOJ, Japan
- "Studies of Gaseous Protoplanetary Disks using SPICA: Summary of Discussion"  
Conference Title: SPICA Science Workshop 2010  
Date: 12/16/2010  
Venue: NAOJ, Tokyo, Japan  
Sponsor: JAXA, Japan
- "Studying Planet Formation Using Infrared High-Resolution Spectroscopy"  
Conference Title: High Resolution Spectroscopy at Large Telescopes  
Date: 2/12-13/2010  
Venue: NAOJ, Tokyo, Japan  
Sponsor: NAOJ, Japan
- "Studies of Exoplanets and Solar Systems with SPICA: Discussion to Date"  
Conference Title: SPICA Science Workshop 2009  
Date: 6/1-2/2009  
Venue: Tokyo, Japan  
Sponsor: JAXA, Japan
- "MIR Observations at TMT to understand star and planet formation"  
Conference Title: Mid-IR Observations and Instrumentation at TMT  
Date: December 2008  
Venue: NAOJ, Tokyo, Japan  
Sponsor: NAOJ, Japan

## Other Presentations in Recent Years (outside Taiwan)

### Oral Presentations

- "Long-Term Monitoring Observations of Active Pre-main Sequence Stars"  
Conference Title: Astronomical Society of Japan 2016 Spring Meeting

Date: 3/14-17/2016  
Venue: Tokyo, Japan  
Sponsors: Astronomical Society of Japan

- "Long-Term Monitoring Observations of Active Pre-main Sequence Stars"  
Conference Title: First MaTYSSE Meeting  
Date: 11/2-4/2015  
Venue: Toulouse, France  
Sponsors: L'Institut de Recherche en Astrophysique et Planétologie (IRAP)
- "Subaru-HiCIAO Studies of Possible Star-Disk and Wind-Disk Interactions Toward Active Young Stellar Objects"  
Conference Title: Canadian Astronomical Society Meeting  
Date: 5/25-27/2015  
Venue: Hamilton, Canada  
Sponsors: Canadian Astronomical Society
- "Vertical Structures of Protoplanetary Disks Inferred From Near-IR Polarimetry"  
Conference Title: Exoplanets and Disks: Their Formation and Diversity II  
Date: 12/8-13/2013  
Venue: Kona, HI, USA  
Sponsor: Ministry of Education, Culture, Sports, Science and Technology Japan;  
National Astronomical Observatory of Japan
- "PDI Observations of the Active Pre-main Sequence Star RY Tau"  
Conference Title: SEEDS 2nd Workshop  
Date: 10/10-12/2011  
Venue: Heidelberg, Germany  
Sponsor: Max Planck Institute for Astronomy

### Poster Presentations

- "Stable and Unstable Regimes of Mass Accretion onto RW Aur A"  
Conference Title: Astronomical Society of Japan 2016 Spring Meeting  
Date: 3/14-17/2016  
Venue: Tokyo, Japan  
Sponsors: Astronomical Society of Japan
- "Stable and Unstable Regimes of Mass Accretion onto RW Aur A"  
Conference Title: EXCHANGING MASS, MOMENTUM, AND IDEAS —  
CONNECTING ACCRETION AND OUTFLOWS  
IN YOUNG STELLAR OBJECTS  
Date: 10/27-29/2015  
Venue: Noordwijk, Netherlands  
Sponsor: ESA/ESTEC
- "Subaru-HiCIAO Studies of Possible Star-Disk and Wind-Disk Interactions Toward Active Young Stellar Objects"  
Conference Title: In the Spirit of Lyot 2015  
Date: 6/22-26/2015  
Venue: Montreal, Canada

- "A SEEDs study of the transitional disk associated with RY Tau"  
Conference Title: Protostars and Planets VI  
Date: 7/15-20/2013  
Venue: Heidelberg, Germany  
Sponsors: <http://www.mpia-hd.mpg.de/homes/ppvi/spon.php>
- "A SEEDs study of the transitional disk associated with RY Tau"  
Conference Title: Canadian Astronomical Society Meeting  
Date: 5/28-30/2013  
Venue: Vancouver, Canada  
Sponsors: Canadian Astronomical Society
- "A SEEDs study of the transitional disk associated with RY Tau"  
Conference Title: Revealing Evolution of Protoplanetary Disks in the ALMA Era  
Date: 5/8-11/2012  
Venue: Kyoto, Japan  
Sponsor: Ministry of Education, Cultural, Sports, Science and Technology
- "A Detailed Study of Spitzer-IRAC Emission in Herbig-Haro Objects"  
Conference Title: AAS 217th Meeting  
Date: 1/9-13/2011  
Venue: Seattle, USA  
Sponsor: American Astronomical Society

## **Grant Awarded as the PI**

*Japan, Ministry of Education, Culture, Sports, Science and Technology and the Japan Society for the Promotion of Science*

- 2007-2009 Wakate-Kenkyuu(B)  
<http://kaken.nii.ac.jp/ja/p/19740110>  
Declined as I accepted the position at ASIAA

*Taiwan, the Ministry of Science and Education (formerly the National Science Council)*

- 2014-present Project for Excellent Junior Research Investigators
- 2011-2014 General Research Project (Individual Research Project)
- 2009-2011 Project for Junior Researcher (Individual Research Project)

## **Supervision**

*Postdocs*

- Dr. Hsu-Tai Lee (Academia Sinica Institute of Astronomy and Astrophysics, April 2009 - February 2013)

- Dr. Mei-Yin Chou (Academia Sinica Institute of Astronomy and Astrophysics, June 2010 - April 2014)
- Dr. Hauyu Liu (Academia Sinica Institute of Astronomy and Astrophysics, November 2012 - October 2015)

Undergraduate students (as summer students and research assistants)

- Mr. Hope How-Huan Chen (National Tsing-Hua University, currently a graduate student at Harvard University, July 2009-July 2010)
- Ms. Yu-Jie Wei (National Taiwan University, July 2014-present)

Other summer students supervised at ASIAA

- Mr. Haegon Koh (Sejong University, Korea, 2009)
- Mr. Denny Wu (National Taiwan University, 2010)
- Mr. Jerome de Leon (University of the Philippines Los Baños, 2014)
- Ms. Dyn Eun (National Seoul University, 2016)
- Mr. Guangwei Fu (University of Wisconsin-Madison, 2016)

Supporting Supervision of Ph.D. Students

- Ms. Emma Brannigan (University of Hertfordshire, October 2003 - September 2004, Principal Supervisor - Dr. Antonio Chrysostomou)
- Mr. Takayuki Nishikawa (Subaru Telescope, September 2004 - March 2007, Principal Supervisor - Professor Masa Hayashi)

I was the second author for their refereed publications (Brannigan, Takami et al. 2006; Nishikawa, Takami et al. 2008).

## **Observational and Technical Experience**

Observations

Significant practical experience in:

- Near-infrared Spectroscopy (IRCS on Subaru 8.2-m, MUSE on the NAOJ 1.5-m Telescope, the former as both an observer and a support astronomer)
- Optical Spectroscopy (Canada-France-Hawaii Telescope 3.6-m, Anglo-Australian Telescope 3.9-m, ESO New Technology Telescope 3.6-m, William Herschel Telescope 4.2-m)
- Adaptive optics observations and wide-field optical imaging (as a Subaru support astronomer)
- Telescope operation at NAOJ 1.5-m

Other experience includes infrared observations at United Kingdom InfraRed Telescope (UKIRT) 3.8-m, Infrared Telescope Facility (IRTF) 3-m, Southern Astrophysical Research (SOAR) Telescope 4.1-m; and radio observations with Atacama Submillimeter Telescope Experiment (ASTE) 10-m and Nobeyama 45-m.

Instrumentation

Development of a near-infrared imaging Fabry-Perot spectrometer "MUSE" (see Takami et al. 2002, ApJ, 566, 910 for details). As a significant part of my MSc and Ph.D. project, I was responsible for:-

- Design for the warm spectrograph optics, including the selection of lens materials, optimization of the lens parameters, tolerance analysis
- Mechanical design and construction for the calibration system, Fabry-Perot mount, mount for the cryogenic camera
- Testing the performances including throughput, accuracy of the flat-fielding, effects of gravitational distortion on the imaging performance

### Computation and Programming

- Extensive experience in python, Starlink, IRAF, UNIX/Linux, Fortran 77
- Experience in html/cgi, Basic, Pascal, C, C++, Assembly
- Revision of the operation GUI for Subaru Adaptive Optics (AO36) using tcl/tk
- Optics Design using code-V

### **Professional Memberships**

- Astronomical Society of Japan
- Canadian Astronomical Society

### **Professional Activities**

- Member of Taiwan Time Allocation Committee for Canada-France-Hawaii Telescope (March 2009-May 2012, Chair in March 2009-July 2011)
- Member of SPICA Task Force (Science Committee for SPace Infrared telescope for Cosmology and Astrophysics) (November 2008-February 2014), Science Panel for International Review for SPICA (February 2011-September 2013)
- Group leader for planet and star formation for discussions and publication of "Optical and Infrared Astronomy in 2020's" organized by Group of Optical and Infrared Astronomers (GOPIRA), Japan (2014-2015)
- Refereeing publications for Astronomy and Astrophysics, and telescope proposals for European Southern Observatory (P93, P94), Subaru (2010, 2011), United Kingdom InfRared Telescope, William Hershel Telescope, Gemini (Canadian TAC)

### **Lectures and Public Talks**

- ASIAA Summer Student Program, "Introduction to Optical-IR Astronomy" (2009-2014)
- AstroTalk (public talks organized by University of Hawaii, Hilo), "Finding and Understanding Extrasolar Planets" (June 2006)

## References

Professor Motohide Tamura  
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...and  
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