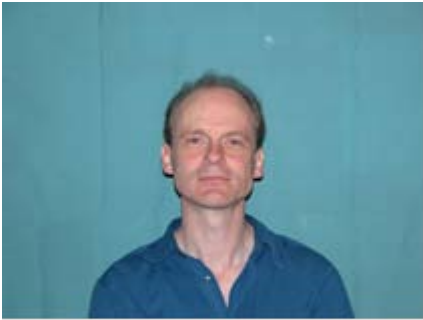


# Journey Through the Universe

2013

Astronomy Educator Profiles



## **Andy Adamson**

**Gemini Observatory**

**Contact: [aadamson@gemini.edu](mailto:aadamson@gemini.edu)**

**Andy Adamson** is currently Associate Director of Operations for Gemini Observatory. British by birth, before arriving on the island of Hawai'i in 1998, Andy was for some ten years a lecturer and computer systems manager at the University of Central Lancashire in the northwest of the United Kingdom. His research focuses on interstellar dust particles - the microscopic motes of silicate and hydrocarbons which pervade the space between the stars and obscure much of the local Universe from our sight. These grains also take a leading role in the life cycle of the stars themselves, assisting the formation process and re-forming and driving the "winds" from stars near the end of their lifespans.



## **Nobuo Arimoto**

**Subaru Observatory**

**Contact: [arimoto@naoj.org](mailto:arimoto@naoj.org)**

**Nobuo Arimoto's** intense interest in astronomy began when a neighbor showed him how to use a telescope when he was 11 years old. He went on to become a student of astronomy at Tohoku University, where he received his Ph.D. in astronomy in 1980. He has held positions the Observatoire de Paris-Meudon in France (1984-1988), the University of Durham in the United Kingdom (1988-1991), the Universitaet der Heidelberg in Germany (1991-1993), the Institute of Astronomy at the University of Tokyo in Japan (1993-2001), and NAOJ in Japan (2001-2012). He served as part of Subaru's Time Allocation Committee (2000-2004) and as Chair of the Subaru Advisory Committee (2004-2012). He took over Director of the Subaru Telescope in April of this year (2012). A heavy user of Subaru's telescope (59 nights as a principal investigator in a little over a decade), Dr. Arimoto focuses his scientific research on understanding galaxy evolution and the properties of individual stars within galaxies.



## **Douglas Arion**

**Carthage College**

Contact: [darion@carthage.edu](mailto:darion@carthage.edu)

**Douglas Arion** is Professor of Physics and Astronomy at Carthage College. He develops new instrumentation in a variety of fields, including astronomy and space science, and conducts astronomy research studying the structure of planetary nebulae. He directs the Carthage Institute of Astronomy and the College's new astronomy facility, the Griffin Observatory. As part of the International Year of Astronomy (IYA) 2009, Doug was a key part of the Galileoscope cornerstone project, formed and managed to manufacture and distribute high quality, low cost telescopes worldwide for the IYA. He is actively engaged in public astronomy education and outreach, forming partnerships with NOAO and the Appalachian Mountain Club.



## **Brad Bailey**

**NASA Lunar Science Institute**

Contact: [brad.bailey@nasa.gov](mailto:brad.bailey@nasa.gov)

**Brad Bailey** received his B.S. in Physics with minors in optics, chemistry and Japanese from the Rose-Hulman Institute of Technology. In 1998, Brad was accepted into the NASA Ames Astrobiology Academy where he worked on the spectroscopic determination of polycyclic aromatic hydrocarbons in the interstellar medium. From there, he received his M.S. in Astrophysics from New Mexico Tech where he used the Very Large Array (VLA) to qualitatively analyze spectra from pulsars. After working for two years at NASA Ames as a hardware engineer for the International Space Station, Brad went back to graduate school at Scripps Institution of Oceanography in San Diego where completed his Ph.D. in marine microbiology and geochemistry. His Ph.D. work included diving into submarine volcanoes in Hawai'i and Samoa via small submersibles to study the interaction between biology, hydrothermal vent water chemistry and rock surfaces. Brad is now the NASA Lunar Science Institute Staff Scientist at NASA Ames and also directs the NASA Ames Academy, a summer student research and leadership development program.



## **Kenyan Beals**

**Hawaii Electric Light Company Contact:**

**[kenyan.beals@helcohi.com](mailto:kenyan.beals@helcohi.com)**

**Kenyan Beals** is the Director of Human Resources for Hawaii Electric Light Company (HELCO). He grew up in Hilo and was most recently working for the University of Hawai'i Institute for Astronomy before taking a position at HELCO. His passion for the environment and for educating people has continued while at HELCO, as he strives to promote the wise and safe use of electricity and teach people about the diverse and unique types of renewable energy that HELCO uses.



## **Matthew Benjamin**

**Fiske Planetarium, University of Colorado at Boulder**

**Contact: [Matthew.Benjamin@Colorado.Edu](mailto:Matthew.Benjamin@Colorado.Edu)**

**Matt Benjamin** is the Producer and Education Programs Manager at Fiske Planetarium at the University of Colorado Boulder. He has a degree in Astrophysics from the University of Colorado. Matt also works for the one of the NASA Lunar Science Institute (NLSI) teams - the Lunar University Network for Astrophysics Research (LUNAR) as assistant E/PO lead. He has written and produced half a dozen planetarium shows that are shown both nationally and internationally. He also created the locally successful lecture series, "Colorado Skies". Matt has been a Co-investigator on about 15 funded grants from NASA, NOAA and NSF.



**Kim Brenton**

**Mauna Kea Visitor Information Station**

**Contact: [kbhibrenton@gmail.com](mailto:kbhibrenton@gmail.com)**

Kim Brenton is an Interpretive Guide and the Volunteer Coordinator at the Visitor Information Station on Mauna Kea. She graduated from the University of Hawai'i at Hilo in 2011 with bachelor degrees in both physics and astronomy. Originally an art major, Kim decided to pursue her undergraduate studies in astronomy shortly after completing an astronomy 101 course at Montgomery College in Maryland. Kim intends on continuing her education with a master's degree, possibly in materials engineering. When not working on the mountain showing the stars to visitors, she enjoys relaxing at the beach, light hiking, and building her photography portfolio.



**Jon Brown**

**UH Manoa Mathematics**

**Contact: [jpbrown@hawaii.edu](mailto:jpbrown@hawaii.edu)**

Jonathan Brown is a current mathematics Ph.D. student at the University of Hawaii at Manoa. His undergraduate work was in mathematics and computer science. Current research focuses on finding a better bound on the number of covering relations in a lattice with  $n$  elements. Past research has involved machine learning, statistical analysis, and signal processing. As a current SUPER-M fellow, Jonathan works with the Honolulu District Office to forge a relationship between research mathematicians and K-12 education in Hawaii.



## **Jennie Berghuis**

**Subaru Telescope**

Contact: [jp\\_lolo@hotmail.com](mailto:jp_lolo@hotmail.com)

**Jennie Berghuis** is an Assistant Telescope Operator for Subaru Telescope. She did her education at the University of Hawai'i at Hilo, graduating with a B.S. in Astronomy in 2007. She gained experience through locally offered internships included studying and reducing asteroid research data collected at NASA's Infrared Telescope Facility (IRTF), working as a Night Attendant for IRTF, assisting in the fabrication, assembly, and organization of Subaru's HiCIAO instrument project, and building a remotely-controlled telescope dome currently in operation on Mauna Loa. She enjoys adventure, backcountry hiking, skydiving, surfing, paddling, snowboarding, movies, playing music, and most importantly: looking up!



## **Paul Coleman**

**UH Institute for Astronomy**

Contact: [gruff@IfA.Hawaii.Edu](mailto:gruff@IfA.Hawaii.Edu)

**Paul Henry Ikaika Coleman** obtained a Ph.D. in 1985 from the University of Pittsburgh and has held positions with the National Radio Astronomy Observatory, Virginia Tech, The Kapteyn Astronomical Institute in The Netherlands, The Sterrewacht (Observatory) in Leiden, New Mexico Tech, The Very Large Array in New Mexico, Yale University, The University of Puerto Rico, and The Arecibo Observatory. Paul came full circle and was hired as an associate astronomer at the UH Institute for Astronomy where he does research and teaches astronomy. He is also the project scientist on the Faulkes Telescope North, the world's largest telescope dedicated to K-12 students in England and Hawai'i. He is a member of the University's Kualii Council, a body of Native Hawaiian professors, instructors, and graduate students at the Manoa campus. As a Native Hawaiian, he is a natural role model for kids in Hawai'i. Paul is a member of several advisory councils aimed at increasing the number of children in science and technology fields.



## Richard Crowe

**UH Hilo Physics & Astronomy**

**Contact: [rcrowe@hubble.uhh.hawaii.edu](mailto:rcrowe@hubble.uhh.hawaii.edu)**

**Richard Crowe**, Professor of Astronomy at UH Hilo since 1992, and Astronomer-in-Residence at the 'Imiloa Astronomy Center of Hawai'i from 2006-2011, was born in Canada. He obtained his Honors B.Sc. and M.Sc. in astronomy from the University of Western Ontario and his Ph.D. from the University of Toronto in 1984. Between 1977-79, he was the Resident Observer for the University of Toronto Southern Observatory at Las Campanas, Chile. He was the Canadian Resident Astronomer for the Canada-France-Hawai'i Telescope (CFHT) Corporation from 1984-87. In 1991, Richard was selected as a Fujio Matsuda Fellow of the University of Hawai'i for his scholarly work. He was Chair of UHH Physics and Astronomy from 1992-2002. In 2002, he completed a new revised version of the popular book **Stars Over Hawai'i**. He was Principal Investigator on the ***New Opportunities through Minority Initiatives in Space Science (NOMISS)*** grant funded by NASA (2001-04), a program designed to encourage local and Hawaiian students from K-16 to enter careers in space science by working with teachers to integrate astronomy with Polynesian skylore, voyaging, and Hawaiian culture. He and NOMISS co-I Alice Kawakami won City Bank's 2001 **TIGR Award** for astronomy outreach efforts, and in 2005, he and teacher Pascale Pinner won Astro Day Excellence in Teaching Awards. Richard has been a member of the ***Journey Through the Universe*** organizational team since the program began in 2005. While at 'Imiloa Center, he delivered many planetarium and StarLab presentations, initiated the inclusion of Hawaiian star-lines into planetarium shows, and along with Inge Heyer, organized Star Trek celebrations around Halloween (he also is a huge fan of Star Trek, Babylon-5, and Doctor Who). In 2010, Richard and Shawn Laatsch each won the ***Taniguchi Excellence and Innovation in Teaching Award*** for their teamwork teaching introductory astronomy in the 'Imiloa planetarium. Richard is Past President of the ***Rotary Club of Hilo Bay***. He has played clarinet in the Hawai'i County Band for 25 years, and in the UH Hilo Orchestra for 5 years. He met his wife Deby while singing in the Waimea Chorus; they performed together in several musicals in Waimea/Kona from 1985-87. Both their daughters were born and raised in Hilo. Jasmine (21) is a singer-songwriter who plays violin and guitar, and who records her own songs with her Puna rock group ***Patina Green***, while Ginger (24) is a young artist who works as a graphics designer in Albuquerque.



## Doris Daou

**NASA Lunar Science Institute**

**Contact: [Doris.Daou-1@nasa.gov](mailto:Doris.Daou-1@nasa.gov)**

**Doris Daou** received her M.Sc. in Astronomy in 1989 from the University of Montreal in Canada. She has significant teaching experience at the undergraduate level, having lectured both at the University of Montreal and Notre Dame University in Lebanon where she taught astronomy, physics, and mathematics courses. After her schooling, she spent nine years at the Space Telescope Science Institute as a member of different instrument teams of the Hubble Space Telescope. In 1999 Doris moved to the Infrared Processing and Analysis Center at Caltech in Pasadena and became the deputy manager of the Cool Cosmos Education and Public Outreach (EPO) team. Doris led the team in designing and creating educational products and resources that would engage students as well as the public to learn more infrared astronomy and space science. Doris is a co-author of the internationally praised tactile astronomy book ***Touch the Invisible Sky***, which enables the visually impaired to learn about the Multiwavelength Universe. She was also the creator, producer and lead writer for the multi-award-winning ***Ask an Astronomer*** video series. In 2006 Doris moved to NASA Headquarters to work as a Program Officer for EPO in the Science Mission Directorate (SMD). She worked on strategic planning and implementation of policy for the organization, management, oversight, and evaluation of an integrated SMD-EPO Program. During the past 20 years of working with NASA missions, Doris has also been active in various education committees, including the council to evaluate the American Astronomical Society education program in 2009; the Astronomical Society of the Pacific Program Committee, the EPO Advisory Group for the Large Synoptic Survey Telescope, the International Year of Astronomy US and IAU Program Committee, and the Women in Astronomy 2009 Conference Program Committee.





## **Kristina Davis**

**University of Colorado Boulder**

**Contact: [davisk44@gmail.com](mailto:davisk44@gmail.com)**

**Kristina Davis** is a recent astrophysics graduate from the University of Colorado. Her work is in testing materials inside a vacuum chamber for a radio telescope that will sit on the Moon. She is interested in pursuing graduate study that will combine astronomy research with instrument development. She is also an avid skier and outdoor enthusiast.



## **Sandra Dawson**

**Thirty Meter Telescope Project**

**Contact: [sdawson@tmt.org](mailto:sdawson@tmt.org)**

**Sandra Dawson** is Manager, Hawai'i Community Relations, for the proposed Thirty Meter Telescope Project. Dawson has a Bachelor of Arts degree in Political Science and a Master's Degree in International Studies from Claremont Graduate University. For 20 years as an employee of the California Institute of Technology (Caltech) she worked at Caltech's Jet Propulsion Laboratory on some of JPL's largest projects for NASA, including the Galileo, Cassini and Mars missions, and received numerous group and individual awards. She retired from Caltech in December and is now on the staff of the TMT Observatory Corporation. She lives in Hilo with her husband Dwayne.



**Brian Day**

**NASA Lunar Science Institute**

**Contact: [brian.h.day@nasa.gov](mailto:brian.h.day@nasa.gov)**

**Brian Day** is a NASA contractor at Ames Research Center. His duties there have included serving as Education and Public Outreach Lead for NASA's LCROSS lunar impactor mission and for the upcoming Lunar Atmosphere and Dust Environment Explorer mission. His hobbies and professional life focus on astronomy. For 16 years, he was chairman of the Foothill College Observatory. Brian and his wife Pam are avid solar eclipse chasers, having traveled around the world to see eight total, five annular, and numerous partial eclipses from such exotic locations as the wilds of Africa, the heights of the Andes, the jungles of Central America, the Australian Outback, the frozen wastes of Northern Mongolia, the base of the Great Wall of China, and the beer gardens of Germany.



**Jeff Donahue**

**Gemini Observatory**

**Contact: [jdonahue@gemini.edu](mailto:jdonahue@gemini.edu)**

**Jeff Donahue** is Senior Laser Technician at Gemini Observatory. He supports the laser guide star, preparing the laser for each laser run. Jeff and his wife came from Oregon, where he spent 17 years at Hewlett Packard. Jeff also worked in Corvallis, Oregon as an electronic and laser maintenance technician supporting Inkjet Manufacturing. Jeff has a B.S. degree in Industrial Technology from Central Washington University and an A.S. degree in Electronic Engineering Technology from Linn Benton Community College. In addition to his laser activities, Jeff enjoys snorkeling and exploring the Big Island.



**Greg Doppmann**

**W.M. Keck Observatory**

**Contact: [gdoppmann@keck.hawaii.edu](mailto:gdoppmann@keck.hawaii.edu)**

**Greg Doppmann** recently moved to Hawaii with his wife and daughter, where he joined W.M. Keck Observatory as a support astronomer. Following his passion for working at world-class observatories, he previously held staff positions at NOAO in Tucson and at Gemini South in La Serena, Chile. He received his Ph.D. at the University of Texas at Austin in 2002. His research interests are focused on star and planet formation. In particular, he uses high-resolution spectroscopy to study the properties of newly forming stars and their circumstellar disks where planets may form. He welcomes the opportunity to interact with the local Hawaiian community and share in the excitement of learning about our universe.



**Angelic Ebbers**

**Gemini Observatory**

**Contact: [aebbers@gemini.edu](mailto:aebbers@gemini.edu)**

**Angelic Ebbers** is a Senior Software Engineer for Gemini Observatory. She is part of the Software Operations group as well as a Telescope Technical Manager. Angelic specializes in motion control systems, EPICS real-time development, and troubleshooting. Angelic earned a B.Sc. from York University in the Space and Communications Sciences stream, with Honors in Computer Science and Physics, plus a minor in Astronomy. Prior to joining Gemini, Angelic worked for The Herzberg Institute of Astrophysics as well as the University of Toronto Southern Observatory in Chile. Outside of work, Angelic can be found training/competing in Dog Agility, scuba diving, or reading a good science fiction book.



**Ryan Felix**

**University of Hawaii – Manoa**

**Contact: [ryan.michael.felix@gmail.com](mailto:ryan.michael.felix@gmail.com)**

**Ryan Felix** is a graduate student at UH Manoa and is a Super-M fellow, with Lanai High and Elementary School researching mathematics and mathematics education. SUPER-M is a project at the Department of Mathematics of the University of Hawai'i at Manoa funded by a National Science Foundation, Graduate STEM Fellows in K–12 Education (GK-12) program. As part of this program he works with K-12 teachers to design innovative, developmentally appropriate, and engaging activities for K-12 students to enhance STEM skills.



**Scott Fisher**

**University of Oregon**

**Contact: [rscottfisher@gmail.com](mailto:rscottfisher@gmail.com)**

**Scott Fisher** is a faculty member within the University of Oregon, Department of Physics, where he teaches astronomy courses and serves as the Director of Outreach for the department. Scott previously worked at the National Science Foundation in Washington, DC where he was responsible for selecting and funding astronomy programs across the United States. Before his time in Washington, Scott worked as a staff member of the Gemini Observatory as an instrument scientist and as a member of the Gemini Outreach team. Scott lived in Hilo-town for just over 10 years while he worked at Gemini. He obtained his Ph.D. from the University of Florida in 2001 after working his way through the Florida state school system, including a stint at Lake Sumter Community College. Scott's main area of research is searching for and studying planet-forming disks around young stars. He is also involved with the design, construction, and use of infrared camera systems that are used on some of the biggest telescopes in the world. He has spent approximately 350 nights observing from the summit of Mauna Kea since his first trip to Hawai'i in 1996. In addition to his love of astronomy, Scott is an amateur photographer and a Geocacher. When he is not on-island, Scott can often be found in Las Vegas, Atlantic City, or anywhere with nightlife full of bright neon lights, poker cards, and casino chips!



**Suzanne Frayser**  
**Subaru Telescope**  
**Contact: [frayser@naoj.org](mailto:frayser@naoj.org)**

**Suzanne G. Frayser** is Subaru Telescope's English Press Officer in the Office of Public Information and Outreach. She earned her B.A. in sociology and anthropology at the College of William and Mary and her Ph.D. in anthropology from Cornell University. She is a member of Phi Beta Kappa and received a Professional Associate Award from the Cultural Learning Institute of the East-West Center at the University of Hawai'i. She has served as a college professor (SUNY Potsdam and Colorado College); the founder and principal researcher of a research and consulting firm (Cultural Insights); and an officer in several professional organizations. She is the author of several scholarly books and many articles. Her main areas of interest are applied anthropology, cross-cultural research and communication, and effective presentation of science to the public.



## **Gary Fujihara**

**UH Institute for Astronomy**

**Contact: [fujihara@IfA.Hawaii.Edu](mailto:fujihara@IfA.Hawaii.Edu)**

**Gary Fujihara** was born in Honolulu, and a resident of Hilo since 1980, with a background in graphic arts, music and computer software engineering, Gary heads the Office of Science Education and Public Outreach at UH Institute for Astronomy. While he was a telescope operator at Subaru in 2002, Gary founded ***Astro Day***, a nationally recognized and award-winning annual event that attracts over 15,000 people every year in Hilo. Gary has been a NASA Jet Propulsion Laboratory Solar system Ambassador since 2004, and is a member of the Astronomical Society of the Pacific, the Astronomical League and the International Dark Sky Association.



## **Roy Gal**

**UH Institute for Astronomy**

**Contact: [rgal@IfA.Hawaii.Edu](mailto:rgal@IfA.Hawaii.Edu)**

**Roy Gal** received his B.A. in Astrophysics from Columbia University in 1994, and his Ph.D. in Astronomy from Caltech in 2001, detecting and studying galaxy clusters from the 2nd Palomar Sky Survey. He then worked on the Sloan Digital Sky Survey at Johns Hopkins University, followed by three years at U.C. Davis, studying galaxy evolution in clusters that formed when the Universe was half its present age. He has been a faculty member at UH Manoa's Institute for Astronomy for six years, continuing to study the evolution of galaxies, while teaching Honors and regular astronomy classes and also heading the Friends of the Institute for Astronomy.



## **Tom Geballe**

**Gemini Observatory**

**Contact: [tgeballe@gemini.edu](mailto:tgeballe@gemini.edu)**

**Tom Geballe** obtained a Ph.D. in physics in 1974 under Prof. Charles Townes at U.C. Berkeley. Following postdoctoral fellowships at Berkeley, Leiden, and a Carnegie Fellowship at Hale Observatories in Pasadena, he became a staff astronomer at the United Kingdom Infrared Telescope (UKIRT) in 1981. He was Astronomer-in-charge, Associate Director, and Head of Operations at UKIRT from 1987 until 1998. Among his research interests are the galactic center, the physics of quiescent and shocked molecular clouds, the late stages of stellar evolution, the composition of interstellar dust, the surfaces, atmospheres, and aurorae of planets and moons, and brown dwarfs. Recent significant papers include spectroscopy/classification of brown dwarfs, detection of H3<sup>+</sup> in both dark and diffuse interstellar clouds, and infrared evolution of erupting stars V838 Monocerotis and Sakurai's Object.



## **Jesse Goldman**

**UH Hilo Physics & Astronomy**

**Contact: [goldman2@hawaii.edu](mailto:goldman2@hawaii.edu)**

**Jesse Goldman** received his B.A. in Physics from Columbia University in 1995 and his Ph.D., specializing in High Energy Physics, from Kansas State University in 2000. He subsequently completed his post-doctoral research, focusing on neutrino oscillations, at Tohoku University in Sendai, Japan, and Lawrence Berkeley National Laboratory. Following his post-doctoral work, he taught as a lecturer in the physics departments of the Calif. Polytechnic State University at San Luis Obispo and the National University of Singapore before joining the faculty at the Dept. of Physics and Astronomy at UH Hilo. His research interests span the fields of particle physics, cosmology, and astrophysics, and his hobbies are linguistics, computer systems, volleyball, and ultimate frisbee.



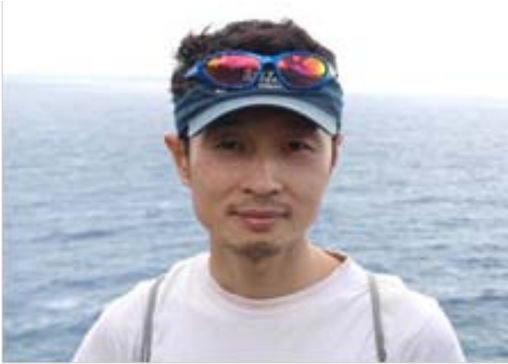
## **Jeff Goldstein**

**National Center for Earth and Space Science Education**

**Contact: [jeffgoldstein@ncesse.org](mailto:jeffgoldstein@ncesse.org)**

**Jeff Goldstein** is a nationally recognized science educator and planetary scientist who has dedicated his career to the public understanding of science and the joys of learning. As Center Director for the National Center for Earth and Space Science Education, Jeff oversees the creation and delivery of programs that engage entire communities, train 3,000 teachers annually, and emphasize family learning. He led the inter-organization team that permanently installed the Voyage model Solar System on the National Mall in Washington, D.C., in front of the Smithsonian. The Voyage National Program is permanently installing low-cost replicas in 100 communities world-wide. Jeff also oversees the Student Spacelight Experiments Program (SSEP) that provides real research opportunities for pre-college students on the Space Shuttle and International Space Station. Jeff was the Keynote Speakers for the NSTA National Conference in San Francisco, California, in March 2011. Jeff was at the National Air and Space Museum for 8 years, departing in 1996 as acting Chair of the Lab for Astrophysics. He was on the senior staff at Challenger Center from 1996-2005. In 2005 he created the National Center for Earth and Space Science Education. Visit Jeff's website at <http://blogontheuniverse.org>.





**Tomotsugu Goto**  
**UH Institute for Astronomy**  
**Contact: [tomo@IfA.Hawaii.Edu](mailto:tomo@IfA.Hawaii.Edu)**

**Tomotsugu Goto** is a postdoctoral researcher at the Institute for Astronomy, University of Hawai'i. He was involved with the Sloan Digital Sky Survey while attending graduate school at the University of Tokyo. While there, he observed unusual spiral galaxies with little star formation. At Johns Hopkins University, he found evidence of downsizing galaxy evolution using the Hubble Space Telescope. While working at the Japanese Space Agency, he did research on cosmic star formation history using the AKARI infrared space telescope. Recently, he found a giant galaxy hosting the most distant supermassive black hole discovered (at the time). Currently he is working on detecting dark energy, independently from supernovae observations.



## Olivier Guyon

**Subaru Telescope**

**Contact: [guyon@naoj.org](mailto:guyon@naoj.org)**

**Olivier Guyon** is an astronomer at the Subaru Telescope. He started looking at stars from the age of 10, and he is now both an avid amateur astronomer and a professional astronomer. Olivier graduated from University of Paris 6 in 2002 (Ph.D. research topic: wide field interferometry), and now works with other scientists to directly observe exoplanets. Olivier has been developing new techniques for imaging exoplanets (planets around other stars) from telescopes on Earth and also future telescopes in space. With these new techniques, astronomers will soon be able to observe planets like ours and start to find out if there is life elsewhere in the Universe. In 2007, Olivier received a Presidential Early Career for Scientists and Engineers award from President Bush at the White House. Olivier received in 2012 the MacArthur fellowship (nicknamed the "Genius grant") for his innovative work in astronomical optics. In his spare time, he builds telescopes which he then uses to observe from the clear skies of Mauna Kea and Mauna Loa.



## John Hamilton

**UH Hilo Physics & Astronomy**

**Contact: [jch@hawaii.edu](mailto:jch@hawaii.edu)**

**John Hamilton** is currently serving as Deputy Director of the Pacific International Space Center for Exploration Systems (PISCES) based at the University of Hawai'i at Hilo. An astronomer by trade, he has been associated with space exploration since 1972 with the Skylab missions, spent most of his career supporting astronomical observations at multiple observatories in Hawai'i on Haleakala and Mauna Kea and also in Chile. He has most recently managed the first two International ISRU analog field tests in Hawai'i in 2008 and 2010 and is currently working on the 2012 deployment. John currently teaches undergraduates in Physics and Astronomy courses at UH Hilo. He also serves as co-founder and chief scientist for a local high-tech R&D company Akeakamai Enterprises LLC.



## Janice Harvey

**Gemini Observatory**

**Contact: [jharvey@gemini.edu](mailto:jharvey@gemini.edu)**

**Janice Harvey** is the Community Outreach and Education Programs Leader for Gemini Observatory and serves as the local team leader for the Journey through the Universe Program on the Big Island. Janice is also the National Team Site leader for the Family Astro program in Hawai'i and serves as a StarLab Portable Planetarium instructor and trainer. In 2010 she was awarded the ***Outstanding Individual in Business*** award by the ***Rotary Club of Hilo***. She is a member of the Astronomical Society of the Pacific, the International Planetarium Society, the National Science Teachers Association, and is coordinator for many of the local science outreach programs on the Big Island. Janice is a long time resident of Hilo and is dedicated to bringing science and astronomy into the local classrooms.



## Saeko Hayashi

**Subaru Telescope**

**Contact: [saeko@naoj.org](mailto:saeko@naoj.org)**

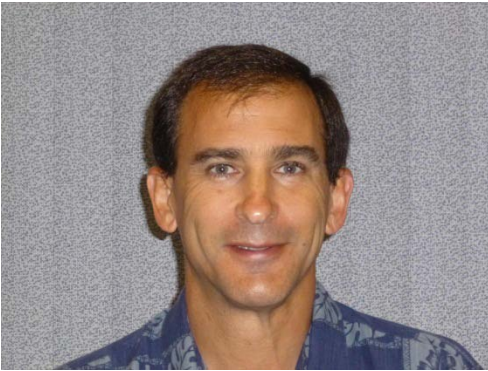
**Saeko S. Hayashi** grew up in Tohoku, a northeastern region of Japan, where she spent part of her childhood in Fukushima. After graduating from a local high school, she boldly went on to attend Tokyo University as one of the few women undergraduates (1% in STEM majors); she continued there and became the first woman to enroll as a full-time student in the Ph.D. astronomy program. She conducted her graduate research at the 45-m radio telescope in Nobeyama, Japan. After receiving her doctorate, she worked at the 15-m James Clerk Maxwell Telescope in Hawai'i and then was a staff member of the 7.5-m Japan National Large Telescope (JNLT) project, which began at the National Astronomical Observatory of Japan in 1990, and later became known as the Subaru Telescope. She has performed a variety of roles at Subaru from fixing mirrors and managing day crews to currently managing the Public Information and Outreach Office. She hopes to participate in the publication of research that will lead to major discoveries of Earth-like exoplanets, possibly with water and vegetation. Saeko is also an active member of the ***Rotary Club of Hilo***. She says, "Subaru Telescope, where people from all over the world come together and work with each other, is a great place to work. The challenges of working at the Mauna Kea summit and the satisfaction of community life in Hilo enrich family life".

# **Stephanie W. Henry**

**Analytical Services, Inc.**

**Contact: [stephanie.i.wilson@nasa.gov](mailto:stephanie.i.wilson@nasa.gov)**

**Stephanie W. Henry** serves as a Communications Strategist with Analytical Services, Inc. in Huntsville, AL. Stephanie's duties include external communications for the Lunar Quest and Discovery/New Frontiers Program Office at NASA's Marshall Space Flight Center. Stephanie assists in developing communication products and materials for the programs. She visits schools, museums, and community organizations to excite students and teachers about NASA's mission and encourages the students to study science, technology, engineering, and math. Stephanie is a graduate of the University of North Alabama where she received a Bachelor of Arts degree in Spanish/Political Science and a Master of Arts in Community Counseling. Stephanie also attended Belmont University in Nashville, TN where she earned her teacher certification for kindergarten through eighth grade. Before joining ASI, Stephanie's experience includes work in a variety of educational arenas. Stephanie spent seven years working in Student Affairs at different universities and seven years teaching in the classroom, formal and informal instruction. Stephanie is a native of Tupelo, MS and has lived in Madison, AL for the past eight years. She recently married and has a 14-year-old stepson. Stephanie enjoys traveling, shopping, tennis, and spending time with her family in her spare time.



## **Stewart Hunter**

**Mauna Kea Support Services**

**Contact: [shunter@ifa.hawaii.edu](mailto:shunter@ifa.hawaii.edu)**

**Stewart Hunter** has been the General Manager at Mauna Kea Observatories Services (MKSS) since 2010. MKSS operates and maintains the mid-level astronomy facilities at Hale Pohaku on Mauna Kea. This includes the astronomy dormitories, the dining facility and the Visitor Information Station as well as maintaining the summit roads. Prior to working at MKSS, Stewart spent 24 years in the Navy, serving on submarines as an electronics technician, then after receiving a commission, a logistics officer until retiring in 2004 as a Lieutenant Commander. He received a BS in Earth Science from Oregon State University in 1991 and a MS in Systems Management from the Naval Post Graduate School in 1999. Stewart and his wife Lory, have been Hilo residents since 2000, where they also own and operate a local Bed and Breakfast.



## **Michael Hoenig**

**Gemini Observatory**

**Contact: [mhoenig@gemini.edu](mailto:mhoenig@gemini.edu)**

**Michael Hoenig** is currently working as a Data Analysis Specialist at Gemini Observatory. He did his undergraduate degree in Astrophysics at the University of Sussex (England) in the mid-1990s, and then went on to do a Ph.D. at the University of Cambridge, which he completed in 2004. His thesis centered around the construction of a wide field infrared camera called CIRSI, which meant he ended up going on a number of observing trips to Mauna Kea and the Canary Islands. Once all the data from the instrument was properly reduced and calibrated, it was used to search for distant clusters of galaxies - and he is happy to report he actually found some, too. After his Ph.D. he worked in translation and publishing for a few years. He is thrilled to be back in astronomy and back in Hawai'i. When he's not examining data from the telescope, he likes to go to the beach, read a good book or dance Argentine tango.



## **Eric Jeschke**

**Subaru Telescope**

**Contact: [eric@subaru.naoj.org](mailto:eric@subaru.naoj.org)**

**Eric Jeschke** is a software engineer at Subaru Telescope, based in Hilo, Hawai'i. He received a Ph.D. in Computer Science from Indiana University in 1995 and has worked since then in various capacities as a software engineer, technical consultant and educator before joining Subaru in 2004. At Subaru, he works on various software development projects, including a next-generation observation control system. His hobbies include photography, music, kayaking and Japanese language, in addition to a perpetual role heading the Big Island Linux Users Group.



## **Russell Kackley**

**Subaru Telescope**

**Contact: [rkackley@naoj.org](mailto:rkackley@naoj.org)**

**Russell Kackley** holds a Bachelor of Science in Mechanical Engineering from Wayne State University and a Master of Science in Mechanical Engineering from Stanford University. He worked for 16 years on spacecraft design and analysis at Lockheed-Martin before moving to Hawai'i. Here in Hilo, he worked for 11 years at the Joint Astronomy Centre and was responsible for the Telescope Control System software. Since April 2011, he has been working at the Subaru Telescope in the Observation Control Software group. He also mentors the Waiakea Intermediate and Honoka'a High School robotics teams.



## **Art and Rene Kimura**

**Hawai'i Space Grant Consortium, UH Manoa**

**Contact: [art@higp.hawaii.edu](mailto:art@higp.hawaii.edu)**

**Art and Rene Kimura** are Education Specialists with Hawai'i Space Grant Consortium, University of Hawai'i at Manoa. They initiated and continue to coordinate the Future Flight Hawaii summer camps which utilize planetary exploration themes as a context to provide engaging and hands on science experiences for children and parents. They also conduct the SpaceFEST and BrushBotFEST family science, provide oversight and coordination for the annual Astronaut Ellison Onizuka Science Day and the Astronaut Lacy Veach Day of Discovery, support the various scholastic robotics programs, helped establish the first three NASA Explorer Schools in Hawai'i, and provide professional development for teachers. They helped initiate the Hawai'i participation in the International Super Science Fair in Kyoto, Japan. Rene received the 2011 national Women in Aerospace Educator Award. Art has received the Biology Teacher of the Year Award for Hawai'i, the first Presidential Award for Excellence in Science Teaching, the Air Force Association Christa McAuliffe Memorial Award, and the Civil Air Patrol National Crown Circle Award, and was Hawaii's representative to the NASA Teacher in Space Project. Rene is a retired social studies teacher and administrator (Honpa Hongwanji Mission School). Art served for 32 years in the Hawai'i Department of Education as a science and aerospace teacher and vice principal (McKinley High School, Kea'au Elementary School, Chiefess Kapiolani Elementary School), and served for 28 years in the U.S. Air Force/Hawaii Air National Guard as an Air Weapons Director, retiring as a Lieutenant Colonel.



## **Rob Kelso**

Pacific International Space Center for Exploration Systems

Contact: **[rkelso54@gmail.com](mailto:rkelso54@gmail.com)**

**Rob Kelso** has worked for NASA for 38 years at the Johnson Space Center in Houston, Texas. During the late 1980's and 90's, Rob served as a Shuttle Flight Director in NASA's famed Mission Control Center (MCC) while directing 25 Space Shuttle missions. His role as Flight Director is the same as Gene Kranz (*Failure is Not an Option*) in the movie "Apollo 13" starring Tom Hanks. During the missions, Rob often used the NASA and Air Force tracking/communications ground stations in Hawaii to monitor the Shuttle and communicate with the astronauts. He is currently the Executive Director of PISCES (Pacific International Space Center for Exploration Systems) in Hilo. PISCES is responsible for conducting robotic operations on the Big Island for testing planetary surface technologies before launch. He has a bachelor's degree in physics and an MBA in public management.





**Markus Kissler-Patig**

**Gemini Observatory**

**Contact: [mkissler@gemini.edu](mailto:mkissler@gemini.edu)**

**Markus Kissler-Patig** grew up in Switzerland and France before moving to Germany for his university studies. He obtained his PhD in astrophysics in 1997 from the University of Bonn and held post-doctoral positions at the University of California Santa Cruz and the European Southern Observatory (ESO) in Germany. He joined the latter as faculty in 2000 as instrument scientist for a series of instruments for ESO's Very Large Telescope. In 2008, he took up the position of project scientist for the 40m European Extremely Large Telescope. In August 2012, Markus Kissler-Patig joined the Gemini Observatory as director. He remains an adjunct professor at the Ludwig-Maximilians University in Munich where he has been teaching astrophysics and astrobiology since 2005.



## Ka'iu Kimura

### 'Imiloa Astronomy Center of Hawai'i

Contact: [kkimura@imiloahawaii.org](mailto:kkimura@imiloahawaii.org)

**Ka'iu Kimura** is Executive Director of the 'Imiloa Astronomy Center of Hawai'i. Ka'iu joined 'Imiloa during its planning phase in 2001 as the Hawaiian content research specialist, and later served as the Center's Experience Coordinator. Born in Kamuela, Ka'iu graduated from Kamehameha Schools' Kapalama campus. She returned to the Big Island to attend UH Hilo, where she earned a Bachelor's degree in Hawaiian studies and a Master's in Hawaiian language and literature. While at UH-Hilo, she participated in the first UH-Hilo student exchange program with the University of Waikato in Hamilton, New Zealand, where she spent a semester studying Maori language and culture. She has also worked for 'Aha Punana Leo in various positions, including as facilitator for Hale Kipa 'Oiwī, an outreach program to other Native American communities and indigenous groups worldwide, working towards language and culture revitalization. An avid canoe paddler, first with the Kawaihae Canoe Club and now with the Keaukaha Canoe Club in Hilo, she was selected to be a member of the 2007 Hokule'a long-distance voyaging crew for the Okinawa-to-Japan leg of that voyage. Ka'iu was also one of eight members selected to the inaugural First Nations Future Indigenous Leadership Program offered by Kamehameha Schools and Stanford University.



## Scot Kleinman

### Gemini Observatory

Contact: [kleinman@gemini.edu](mailto:kleinman@gemini.edu)

**Scot** (there was a shortage of "t"s when he was born) **Kleinman** is an astronomer at Gemini North. He works as the Instrument Program Scientist, helping develop and bring to fruition the next generation of Gemini instruments. He joined Gemini from the Subaru Telescope where he served as the Instrument Division Chief. Prior, he served as the Site Science Manager/Deputy Head of Survey Operations for the Sloan Digital Sky Survey. He has been the Associate Director of the Whole Earth Telescope and still sits on its board. Scot received his Ph.D. from the University of Texas in 1995. He studies various aspects of white dwarf stars, the longest lived (and final) stage of most stars in the Universe. Scot also works with data from large astronomical surveys which are ushering in a new era of observational astronomy. When not working (when is that?), Scot likes surfing, live music, and maintaining/modifying his car.



## Shawn Laatsch

**'Imiloa Astronomy Center of Hawai'i**

**Contact: [slaatsch@imiloahawaii.org](mailto:slaatsch@imiloahawaii.org)**

**Shawn Laatsch** is Planetarium Manager for the 'Imiloa Astronomy Center of Hawai'i. He serves as an Executive Officer in the International Planetarium Society, the world's largest organization of planetarium professionals. Over the past 24 years Shawn has been actively involved in planetarium program development and astronomy education in museum, university, and K-12 settings. He is also actively involved in astronomy outreach and education and is a NASA JPL Solar System Ambassador. He has taught astronomy at the University of Louisville, East Carolina University, and Pitt Community College. In 2008 he received the International Planetarium Society's Service Award for dedication to the planetarium field, and in 2010, Shawn and Richard Crowe each won the *Taniguchi Excellence and Innovation in Teaching Award* for their teamwork teaching introductory astronomy in the 'Imiloa planetarium. He has a passion for cultural and historical astronomy and worked on a major program for the International Year of Astronomy in 2009. Prior to his position at 'Imiloa Astronomy Center of Hawai'i, he served as the Director of the Gheens Science Hall & Rauch Planetarium at the University of Louisville and the Arthur Storer Planetarium in Prince Frederick, Maryland. He has been an invited guest speaker on astronomy and planetariums in Argentina, Brazil, Germany, Greece, Japan, New Zealand, and Russia.



## Bernhard Laurich

**Hawai'i Community College**

**Contact: [laurich@hawaii.edu](mailto:laurich@hawaii.edu)**

**Bernhard Laurich** received his Ph.D. in Physics at the University of Stuttgart, Germany, where he studied the electronic properties of silicon. In 1986 he moved to the U.S. and spent 10 years at the Los Alamos National Laboratory doing research on layered inorganic and organic semiconductors and their structural, electric and electro-optic properties. In 1996 he followed his passion to create and foster interest in science, and since that time he has been teaching Physics, Chemistry and Astronomy at Hawai'i Community College. His most recent interests are astrobiology and sustainable energy systems.



## **Nancy Levenson**

### **Gemini Observatory**

**Contact:** [nlevenson@gemini.edu](mailto:nlevenson@gemini.edu)

**Nancy Levenson** is Deputy Director and Head of Science at Gemini Observatory, based at Gemini South in Chile. She earned bachelor's degrees from Harvard University and the University of Oxford before receiving a Ph.D. in astronomy from the University of California, Berkeley, in 1997. After postdoctoral research at the Johns Hopkins University, she joined the faculty in the Department of Physics and Astronomy at the University of Kentucky in 2002. She joined Gemini Observatory in 2009. Nancy's primary research interests are active galaxies and star formation in their nuclei, which she explores over a range of wavelengths, from the mid-infrared through X-rays.

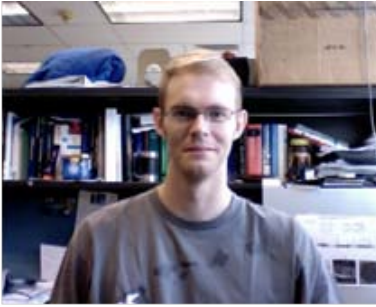


## **Ramsey Lundock**

### **Subaru Telescope**

**Contact:** [lundock@naoj.org](mailto:lundock@naoj.org)

**Ramsey Lundock** graduated from the University of Florida with degrees in Japanese and Physics, including a year of studying abroad at Kansai Gaikokugo Daigaku (Kansai Foreign Language University.) He worked for 3 years on the family thoroughbred horse farm and cattle ranch, where he had the incomparable thrill of watching their horse Supervisor run in the 2003 Belmont. He later entered graduate school, first at the University of Florida then at the Tohoku University Astronomical Institute in Sendai, Japan. Here Ramsey created the Tohoku-Hiroshima-Nagoya Planet Spectra Library, the world's first comprehensive library of solar system planet spectra. Unfortunately, his five wonderful years in Japan are overshadowed by the 2011 earthquake and tsunami that struck Sendai. Luckily, Ramsey and his new bride were spared the worst of the damage and were able to recover quickly enough to graduate on time and find a new job at the Subaru Telescope. In his spare time Ramsey is an author. His work has appeared in three languages and the English Edition of Japan's Asahi Newspaper.



## **Frantz Martinache**

**Subaru Telescope**

**Contact: [frantz@naoj.org](mailto:frantz@naoj.org)**

**Frantz Martinache** grew up in France and graduated from the University of Marseille in 2005 with a Ph.D. in astronomy, completed under the direction of optical interferometry pioneer Prof. Antoine Labeyrie. His Ph.D. work also included a 7- month internship at the Subaru Telescope in Hilo, during which time he fell for the Big Island. His research interests include low mass stars, brown dwarfs and extrasolar planets. However, instead of simply using telescopes and instruments the way they were designed (which is too boring), he likes to tinker and tweak, and have the instruments do new things. He came back to the Subaru Telescope in the fall of 2008 to assemble and test an extreme Adaptive Optics system that will take direct images of planetary systems around nearby stars. In his spare time, Frantz trains in the martial art of aikido, plays heavy metal with his guitar, hacks computers and electronics, as well as reads and draws.



## **Tony Matulonis**

**Gemini Observatory**

**Contact: [matuloni@gemini.edu](mailto:matuloni@gemini.edu)**

**Tony Matulonis** is a System Support Associate at the Gemini North Observatory in Hilo Hawai'i. He earned his Bachelor of Science in Astronomy from the University of Hawai'i at Hilo in 2002. After working as an Interpretive Guide at the Ellison Onizuka Center for International Astronomy Visitor Information Station, Observatory Night Attendant at the NASA IRTF, and Telescope Operator at the UH 2.2-meter on Mauna Kea, he joined Gemini Observatory in 2003. His interests include adaptive optics and laser guide star systems.



**R. Pierre Martin**

**UHH Physics & Astronomy**

**Contact: [rpm33@hawaii.edu](mailto:rpm33@hawaii.edu)**

**Dr. R. Pierre Martin** is an Assistant Professor of Physics and Astronomy and the Director of the UH Hilo Hoku Ke'a Observatory on Mauna Kea. He earned his MS and PhD in astrophysics at Universite Laval in Quebec, Canada. He has held post-doctoral fellowship positions at Steward Observatory in Arizona, and with the European Southern Observatory New Technology Telescope in Chile. Between 1997 and 2008, Dr. Martin was a resident astronomer at the Canada-France-Hawaii Telescope on Mauna Kea, and its Director of Science Operations for six years. Prior to joining UH Hilo, he was the Executive Director of the WIYN 3.5m telescope on Kitt Peak (Arizona) and also a consultant for the Giant Magellan Telescope project. Dr. Martin fields of research include the chemical evolution of galaxies, massive star formation, galaxy morphology, planetary nebulae, astronomical instrumentation and the optimization of the observational process for professional observatories.



## **Richard McDermid**

**Gemini Observatory**

**Contact: [rmcdermi@gemini.edu](mailto:rmcdermi@gemini.edu)**

**Richard McDermid** is a Gemini Science Fellow at Gemini North, and currently the NIFS instrument scientist. Richard obtained an M.Sc. in 1999 from St. Andrews University in his native country of Scotland, and studied his Ph.D. at Durham University in the north-east of England. From 2002, following his Ph.D., he spent five years as a postdoctoral fellow at Leiden Observatory in the Netherlands, and joined Gemini in 2007. Richard's instrumentation expertise is focused on integral-field spectroscopy and adaptive optics, which also form the basis of his research interests. Richard currently works on investigating stellar populations and dynamics in early-type galaxies with a view to understanding how massive galaxies form and evolve. Richard also works on measuring the properties of super-massive black holes in nearby passive galaxies through the application of dynamical models.



## **Callie McNew**

**James Clerk Maxwell Telescope – Joint Astronomy Centre**

**Contact: [mcnew@hawaii.edu](mailto:mcnew@hawaii.edu)**

**Callie McNew** Callis currently a Telescope System Specialist at the James Clerk Maxwell Telescope. Callie recently graduated from the University of Hawai'i at Manoa in the Spring of 2012 with a Master's degree in Educational Technology. Callie has worked for several Mauna Kea observatories over the past eight years fulfilling a variety of positions including public outreach, laser operations, and telescope operations.



## **Peter Michaud**

**Gemini Observatory**

**Contact: [pmichaud@gemini.edu](mailto:pmichaud@gemini.edu)**

**Peter D. Michaud**, Gemini's Public Information and Outreach Manager, has pursued a career that has provided a broad set of experiences in education, media relations and photography. These have ranged from the initiation and management of many informal science education programs to the authoring of a monthly newspaper column on astronomy. Prior to moving to Honolulu in 1989 to manage the Bishop Museum Planetarium, Peter obtained his Bachelor's Degree in Atmospheric Physics and certification in Physical Science Education in 1985. This led to his selection for the highly competitive annual planetarium education internship at the Strasenburg Planetarium in Rochester N.Y. in 1985 - 86. During almost a decade at the Bishop Museum Planetarium, Peter worked closely with local educators as well as the Mauna Kea astronomical community and initiated many new projects that included a NASA-funded project to produce a nationally distributed planetarium program about Mauna Kea. In June 1998, Peter accepted his current position at the Gemini Observatory in Hilo. Since arriving here, Peter has been involved in a variety of projects that have included the management of multiple outreach, education and media relations initiatives. An example of the innovative products produced by his office is the Gemini Observatory Virtual Tour CD-ROM/Kiosk which is currently being translated into multiple languages and has been installed in a variety of public facilities around the world. His staff has grown from himself to seven employees since 1998 and he continues to expand the impact of Gemini's Public Information and Outreach programming locally, nationally and world-wide.



## **Brian Mitchell**

**NASA Lunar Science Institute**

**Contact: [brian.k.mitchell-1@nasa.gov](mailto:brian.k.mitchell-1@nasa.gov)**

**Brian Mitchell** has worked on various Space Shuttle payload missions including ASTRO, ATLAS, and Spacelab, as well as several commercial payloads for the International Space Station. He is currently the Education and Public Outreach (EPO) Lead for the Robotic Missions Program Office at the Marshall Space Flight Center in Huntsville, Alabama. This office includes the Discovery, New Frontiers, Lunar Quest, and Technology Demonstration Missions program offices. He has supported LRO, LCROSS, JUNO, GRAIL, and IML launches to the Moon, Jupiter, and Mars, and is currently working with the LADDE EPO team to develop educational launch activities at Wallops Island, for a science mission to study the thin lunar exosphere.





**Joseph Minafra**

**NASA Lunar Science Institute**

**Contact: [joseph.minafra@nasa.gov](mailto:joseph.minafra@nasa.gov)**

**Joseph Minafra** currently serves as Deputy Director of Communications and Outreach for the NASA Lunar Science Institute (NLSI). Additionally he is Sr. Application Developer and Collaborative Technology Specialist for Lockheed Martin at NASA Ames Research Center. Minafra formally was responsible for a wide variety of tasks for the NASA Ames Center Director, Space Sciences and BioSciences Divisions. His work will link the communication and educational public outreach needs of competitively selected science teams across the nation. The NASA Lunar Science Institute helps to lead the agency's research activities related to NASA's lunar exploration goals. NLSI research includes studies of the Moon (including lunar samples), from the Moon, and on the Moon.



## Janet Nathani

### Mauna Kea Visitor Information Station

Contact: [Nathani@hawaii.edu](mailto:Nathani@hawaii.edu)

Originally from Pennsylvania, Janet started school at East Stroudsburg University, majoring in Biology. During her senior year, she decided to come to Hawai'i through the National Student Exchange program. Falling in love with the ocean and Mauna Kea, Janet found her new home on the Big Island, where she is now living permanently. Currently, Janet Nathani is an Interpretive Guide at Mauna Kea Visitor Information Station (VIS), where she provides safety information to visitors, conducts star gazing activities and summit tours. She is also the Universe Tonight coordinator at the VIS, which is a free public event that enables astronomers from different observatories to present their research to the public. Aside from work, Janet aims to obtain her biology degree in May 2013. In the future, Janet plans to attend a Natural Medicine School in Hawai'i, where she can learn the skills of Chinese medicine and preventive care. In her spare time, Janet enjoys stargazing on Mauna Kea, going surfing and living the aloha lifestyle.



## Harriet Parsons

### Joint Astronomy Centre

Contact: [h.parsons@jach.hawaii.edu](mailto:h.parsons@jach.hawaii.edu)

**Harriet Parsons** moved to Hilo in 2011 and is a Staff Astronomer for the James Clark Maxwell Telescope. This is her first job after completing her Ph.D. at the University of Hertfordshire in the United Kingdom. Her day-to-day job varies widely from assisting visiting astronomers both in terms of health and safety and in terms of quality of images, to working on data from the newest instrument on the JCMT: SCUBA-2. When she has time, her research focuses on cold dense clouds (made of gas and dust) within our own Milky Way galaxy looking at where massive stars may be forming. These stars are more than eight times the mass of our sun and end violently in supernovae; however the way they form is shrouded in mystery (well, OK, dust!). Using the JCMT astronomers can "see" through the dust helping to unlock the secrets of these clouds. Away from astronomy she enjoys paddling with Puna Canoe Club, learning Hula, snorkeling, and traveling. She also loves going to the diverse events available in Hilo, from Shakespeare in the Park to watching Paradise Roller Girls!



## Geoff Patterson

**University of Hawaii Manoa**

**Contact: [geoff@math.hawaii.edu](mailto:geoff@math.hawaii.edu)**

**Geoff Patterson** is a graduate student at UH Manoa studying mathematics, as well as a Super-M Fellow with Kanuikapono Public Charter School, Kauai. The Super-M program is a project funded by a National Science Foundation, Graduate STEM Fellows in K-12 Education (GK-12) program, focused on bringing university level STEM research to K-12 teachers and classrooms. Geoff's research primarily involves control theory, and spacecraft mission design.



## Christopher Phillips

**Imiloa Astronomy Center of Hawaii**

**Contact: [cphillips@imiloahawaii.org](mailto:cphillips@imiloahawaii.org)**

**Christopher Phillips** is originally from the United Kingdom and is based at the 'Imiloa Astronomy Center of Hawai'i. He has been involved in science communication and education working in science centers and museums internationally. At 'Imiloa Astronomy Center he is part of the planetarium team responsible for producing fulldome content and has worked on numerous fulldome productions including the Awesome Light series. Christopher also works internationally as an independent consultant and researcher on projects as diverse as museum programming, exhibit design, science communication training, international development and education. Most recently Christopher has served as scientific consultant for the construction of new radio telescope at Kazan University in the Russian Federation and science park facilities at Goonhilly satellite base station in the United Kingdom. Christopher is also a regular contributor to Guru Magazine, a brand new online popular science publication. He is also an active member of Astronomers without Borders and he founded the 'Reach for the Stars - Afghanistan' program – an effort to bring science education to children of conflict zones and the developing world.



## **Derrick Pitts**

**Franklin Institute Science Museum**

**Contact: [dpitts@fi.edu](mailto:dpitts@fi.edu)**

**Derrick Pitts** has been associated with the Franklin Institute Science Museum since 1978, designing and presenting many of the museum's public programs and exhibits. Derrick was the original director of the Tuttleman OMNIMAX Theater, museum vice-president and many other valued positions. He has been Chief Astronomer and Director of the Fels Planetarium since 1990, having written and produced more than two-dozen planetarium programs. He served as the U.S. National Spokesperson for the IAU International Year of Astronomy 2009 and currently is a NASA Solar System Ambassador. He has written numerous astronomy columns for newspapers and national magazines. For nearly two decades, he hosted award-winning astronomy radio programs on Philadelphia's WHYY 91 FM and on WXPB's 'Kids' Corner' radio program. Derrick is an "on-air" content contributor to Current TV's Countdown with Keith Olbermann, to CNN and to MSNBC. He also recently appeared on "The Colbert Report" and "The Late, Late Show with Craig Ferguson". Derrick is nationally known as an excellent 'teacher'. His presentations are stimulating, humorous, intellectually challenging, compelling and at the same time accessible to the broadest audiences. He puts his emphasis on making sure that everyone can come to appreciate the universe as he sees it – not a watered-down sketch of the universe, but a rich, deep, complex version with human connections that everyone can understand at some level. Among his many awards are the Mayor's Liberty Bell, the St. Lawrence University Distinguished Alumni Award, the G.W. Carver Medal, Please Touch Museum's "Great Friend To Kids" Award, induction into the Germantown Historical Society Hall of Fame, selection as one of the "50 Most Important Blacks in Research Science" by Science Spectrum Magazine, the 2010 inaugural recipient of the David Rittenhouse Award, and an honorary Doctor of Humane Letters degree from LaSalle University. He and his wife Linda reside in the Centennial Park section of Philadelphia.



## **Tae-Soo Pyo**

**Subaru Telescope**

**Contact: [pyo@naoj.org](mailto:pyo@naoj.org)**

**Tae-Soo Pyo** is a Support Astronomer at the Subaru Telescope. His research focuses on star formation, especially, outflows from young stellar objects. He is actively involved the development of new infrared instruments which will facilitate this research. Tae-Soo Pyo did his undergraduate work in the Department of Astronomy at Seoul National University in 1992 and continued on to get his Master's degree in 1994. He then transferred to University of Tokyo. Pyo worked at the Subaru Telescope as a Jr. Astronomical Researcher from 2000 until he received his Ph.D in 2003. During this time, he participated in the final development and engineering observations for the Infra-Red Camera and Spectrograph (IRCS). After graduating, he continued at the Subaru Telescope as a Korea-Subaru Liaison Researcher for Multi-Wavelength Observational Study of Outflows Emanating from Young Stellar Objects. In 2005 he became a support astronomer for IRCS, the same instrument he helped develop as a Jr. Astronomical Researcher.



## **Julie Renaud-Kim**

**W.M. Keck Observatory**

**Contact: [julierk@keck.hawaii.edu](mailto:julierk@keck.hawaii.edu)**

**Julie Renaud-Kim** was born the youngest of seven children in Alhambra, California. While at Alhambra High School she became involved in Biomed, a program promoting scientific research. By her senior year, she was studying comets Hale-Bopp and Hyakutake at California State University, Los Angeles. After graduation, she continued her studies in astronomy and garnered more telescope experience at Pomona College. The next step in her personal astronomical journey was the W.M. Keck Observatory, where she is an Observing Assistant, a position which requires her to operate the Keck telescopes and aid researchers in obtaining scientific data. She has always been interested in sharing her knowledge with others, through tutoring, teaching or just talking story. Journey Through the Universe has given her a new way to reach out.



Adam W. Rengstorf  
Purdue University  
Email: [adamwr@purduecal.edu](mailto:adamwr@purduecal.edu)

Adam is an associate professor of physics & astronomy in the Dept. of Chemistry and Physics at Purdue University Calumet, where he has been teaching since 2005. When not teaching physics and astronomy courses, his research is on the time variability of quasars. Prior to that, Adam spent a couple years as a post-doc at the University of Illinois, where he split his time between the Dept. of Astronomy and the NCSA. He received his M.A. and Ph.D. in astronomy from Indiana University and a B.S. in physics from Binghamton University in New York. He currently lives in northwest Indiana with my wife, daughter, and a retired greyhound.



**Bo Reipurth**

**Institute for Astronomy**

**Contact: [reipurth@ifa.hawaii.edu](mailto:reipurth@ifa.hawaii.edu)**

Bo Reipurth graduated from the University of Copenhagen in Denmark. After spending some years as a postdoc there, he took up a position as staff astronomer with the European Southern Observatory in Chile for 11 years. Subsequently, he worked at CASA in Colorado as a Research Professor, and later joined the Institute for Astronomy at the University of Hawaii in Manoa in order to pursue studies of star and planet formation.

"One of my first astronomical experiences as a small kid was to see the craters of the Moon and the rings of Saturn through the telescope at the public observatory on top of the Round Tower in Copenhagen. After that I was never in doubt that I had to become an astronomer. Conditions in Copenhagen were already in those days not ideal for looking at the night sky, but instead I spent innumerable hours with my small telescope drawing sunspots as they crossed the Sun. I took out a subscription to Sky and Telescope, which I then painstakingly read through with the help of a dictionary. One day I read an article about small mysterious blobs called Herbig-Haro objects which might be signposts of stars in the making. I was completely captivated by the possibility that we might actually be able to see stars in the process of being born, and I have spent most of my professional career trying to learn about how stars are formed."



## **Luca Rizzi**

**W.M. Keck Observatory**

Contact: [lrizzi@keck.hawaii.edu](mailto:lrizzi@keck.hawaii.edu)

**Luca Rizzi** received his Ph.D. from Padova University, Italy, in 2003. He then came to the University of Hawai'i at Manoa as a post-doctoral researcher. His interest in observational astronomy brought him to the island of Hawai'i in 2007, when he became a support astronomer at UKIRT, within the Joint Astronomy Centre, mostly working on the large international project called UKIDSS and on the wide field infrared camera WFCAM. In 2011, he moved to the W.M. Keck Observatory in Waimea, where he is a support astronomer. Luca studies nearby galaxies, to understand their formation and their history, using the properties of their resolved stellar populations. He likes cooking and scuba diving, and is involved in the hula community.



## **Kathy Roth**

**Gemini Observatory**

Contact: [kr Roth@gemini.edu](mailto:kr Roth@gemini.edu)

**Kathy Roth** is an Associate Scientist based at Gemini North. She is the instrument scientist for the Gemini Multi-Object Spectrograph (GMOS-N) and has been with Gemini since July 2000. She obtained her B.Sc. in Physics and Computer Science at Duke University in 1985 and her Ph.D. in Astrophysics from Northwestern University in 1992. She held a postdoctoral position at the Space Telescope Science Institute (STScI) in Baltimore from 1992 until 1995, followed by a Hubble Fellowship at the University of Hawai'i Institute for Astronomy from 1995 until 1998. In 1998 she joined the staff of the Far Ultraviolet Spectroscopic Explorer (FUSE) at Johns Hopkins University in Baltimore. Her research interests include the chemical enrichment of the interstellar medium in our galaxy and in the high-redshift universe via quasar absorption line spectroscopy, the study of distant young galaxies, and the use of gamma ray bursts to probe chemical enrichment of the early universe by the first stars.





**Doug Simons**

**Canada-France-Hawaii Telescope**

**Contact: [simons@cfht.hawaii.edu](mailto:simons@cfht.hawaii.edu)**

**Doug Simons** received his B.S. in astronomy at the California Institute of Technology in 1985, and a Ph.D. in astronomy at the University of Hawai'i in 1990, before working as a staff astronomer at the Canada-France- Hawai'i Telescope (CFHT) for 4 years. Doug joined Gemini in May of 1994 as the Systems Scientist, then managed Gemini's instrument development program for 5 years before becoming Gemini's Director from 2006-2011. Doug returned to CFHT in 2012 where he now serves as Executive Director. Principal areas of interest include infrared instrumentation and studies of the Galactic center, low mass stars, and star formation regions.



## **Evan Sinukoff**

**UH Institute for Astronomy - Manoa**

**Contact: [sinukoff@ifa.hawaii.edu](mailto:sinukoff@ifa.hawaii.edu)**

**Evan Sinukoff** is a first year graduate student at the University of Hawaii Institute for Astronomy. Born and raised in Toronto, Canada, he completed his undergraduate degree at McMaster University, majoring in Physics. As part of this degree, he spent time working as a research assistant at NASA's Goddard Space Flight Center in Maryland. There, he had the opportunity to meet astronauts, and was exposed to the amazing world of space exploration. He became particularly interested in the detection and characterization of these extrasolar planets, especially those which might be host to alien life. Presently, as a graduate research assistant of Dr. Andrew Howard, he is analyzing the occurrence patterns of hot Jupiter-size planets to better understand how they form. He has participating in searches for smaller planets using some of the world's most powerful telescopes at the summit of Mauna Kea. Aside from astronomy, I love to hike, surf and play a variety of different sports, and, as most Canadians, this includes ice hockey.



## **Sharon Schleigh**

**Purdue University**

**Contact: [schleighs@yahoo.com](mailto:schleighs@yahoo.com)**

**Sharon Price Schleigh** has been an educator for over 20 years, teaching all ages from pre-school to university. She received her doctoral degree from Arizona State University and is currently an Assistant Professor at Purdue University. Her research interests include understanding how people think about and engage in science. This has led to research projects that have examined argumentation in a science classroom; authentic research in astronomy and problem-based curriculum designs; how students, teachers and scientists think about the nature of science; and how curriculum impacts content knowledge and attitudes about science. She has been involved projects such as the NASA Deep Impact Mission (Institute for Astronomy, Hawaii); Toward Other Planetary Systems (IFA/NSF); Ali'i Astrobiology Summer Workshops; and Teacher Leaders in Research-Based Science Education (NOAO, Kitt Peak). She has been on the education board for the Las Cumbres Observatories of Global Telescopes network (LCOGT), the Faulkes Telescopes, and GoScience. She is the current director of the Research Engaged Science Teacher Education Program to improve STEM (RESTEP to STEM), funded by NASA and the NC Space Grant to promote astronomy/science education with pre-service teachers. She has served as a Regional Science & Engineering Fair Director, a Regional Science Olympiad Director, a trainer and presenter of the ECU Portable Planetarium program, an AAPT State Representative (HI), as the Mentor Coordinator for the Near East School Alliance Virtual Science Fair.



## **Gordon Squires**

### **Thirty Meter Telescope Project**

Contact: [squires@tmt.org](mailto:squires@tmt.org)

**Gordon K. Squires** is an astronomer at the California Institute of Technology, working with the Thirty Meter Telescopes as well as NASA's Spitzer Space Telescope, the Herschel Space Observatory, the Galaxy Evolution Explorer and other space telescopes with Caltech involvement. His research explores the old, cold and distant universe, understanding how galaxies formed billions of years ago, and the nature of the dark matter and dark energy that fills space.



## **Sunny Stewart**

### **Gemini Observatory**

Contact: [sunnystewart@gmail.com](mailto:sunnystewart@gmail.com)



**Nathan Sump**

**UH Hilo Physics & Astronomy**

**Contact: [nsump@hawaii.edu](mailto:nsump@hawaii.edu)**



**Aaron Tamura-Sato**

**Subaru Observatory**

**Contact: [aaronts@hawaii.edu](mailto:aaronts@hawaii.edu)**



## **Marianne Takamiya**

**UH Hilo Physics & Astronomy**

**Contact: [takamiya@hawaii.edu](mailto:takamiya@hawaii.edu)**

**Marianne Takamiya** comes from Chile where she obtained her B.Sc. in Physics. She earned her Ph.D. in Astronomy and Astrophysics from The University of Chicago and came to Hilo in 1998 as one of the first Gemini Science Fellows. She is a mother of two children and wife of an astronomer. She is currently an Assistant Professor in the Department of Physics and Astronomy at the University of Hawai'i at Hilo where she teaches physics and astronomy courses and studies the evolution of galaxies and star formation in galaxies near and far.



## **Holly Thomas**

**Joint Astronomy Centre**

**Contact: [h.thomas@jach.hawaii.edu](mailto:h.thomas@jach.hawaii.edu)**

**Holly Thomas** is a Staff Astronomer at the James Clerk Maxwell Telescope. She received her Ph.D. in Astrophysics in 2007 from the University of Manchester in the UK. In her current role she is responsible for maintaining the pointing model for the telescope, assisting visiting astronomers, as well as spending some time pursuing her own research. Her research interests center on galactic star formation with a particular focus on the most massive stars. These huge stars form deep inside giant clouds of gas and dust, which makes them impossible to see directly. Instead, Holly uses the JCMT and other submillimeter telescopes to peer inside these clouds and understand the mechanisms by which stars form within them. In her spare time she likes to explore the islands both on land and in the sea. She also enjoys finding new places to eat and drink, reading mystery novels and trying out different sports.



## **Marcel Tognetti**

**Gemini Observatory**

**Contact: [mtognetti@gemini.edu](mailto:mtognetti@gemini.edu)**

**Marcel Tognetti** was born and raised in Amsterdam, The Netherlands. He holds a Bachelor's degree in Mechanical Engineering. Marcel worked in computer chip manufacturing as a systems expert at Philips Semiconductors in The Netherlands, Sematech in Austin, Texas, and Infineon Technologies in Dresden, Germany. He moved to Hawai'i in 2004 and has worked both for the Joint Astronomy Centre and for the Gemini Observatory. Marcel is married, with two adult children and a cat.



## **Kumiko Usuda**

**Subaru Telescope/ 'Imiloa Astronomy Center of Hawai'i**

**Contact: [kumikousuda@gmail.com](mailto:kumikousuda@gmail.com)**

**Kumiko Usuda** is a Japanese astronomer who served as an outreach scientist at Subaru Telescope until March of 2011. Since that time she has been a volunteer at 'Imiloa helping with educational events and planetarium projects. She has visited many local classrooms and provided hands-on workshops to share the fun of astronomy and science with pre-K children, K-12 students, and their families. She is also happy to talk to sight- and hearing-impaired students about outer space. Working with the Mauna Kea Observatories Outreach Committee (MKOOC), she led several outreach projects such as "Mauna Kea Brand Astronomy Trading Cards" using images taken with Mauna Kea telescopes, and "Mauna Kea Coin Contest" for K-12 students on the Big Island of Hawai'i.



## **Bernie Walp**

**Gemini Observatory**

**Contact: [bwalp@gemini.edu](mailto:bwalp@gemini.edu)**

**Bernie Walp** is a System Support Associate at Gemini North Observatory. He followed a two-decade career in public-opinion research and political strategy consulting with the study of mathematics and a bachelor's degree from San Francisco State University. He served as a research aide and observer for the California and Carnegie Planet Search at UC Berkeley under Profs. Geoff Marcy and Debra Fischer, then as a telescope operator at Lick Observatory, and later as the site director of Mt. Wilson's Infrared Spatial Interferometer under Prof. Charles Townes of UC Berkeley.



## **Jonathan Williams**

**UH Institute for Astronomy**

**Contact: [jpw@IfA.Hawaii.Edu](mailto:jpw@IfA.Hawaii.Edu)**

**Jonathan Williams** is an Astronomer at the University of Hawai'i at Manoa and currently the Faculty Chair of the Institute for Astronomy. He grew up near Oxford, England, but left that shabby university town to read mathematics at Cambridge. He then followed his childhood passion to become an astronomer by getting a Ph.D. at the University of California at Berkeley. He has since worked at five U.S. universities, doing research at Harvard, Arizona, then teaching at Florida, before finding his place in paradise. He uses the radio telescopes on Mauna Kea and elsewhere to study the formation of stars and planets.



**Josh Williams**

**Subaru Observatory**

**Contact: [jcwilliams@naoj.org](mailto:jcwilliams@naoj.org)**

**Josh Williams** is an Operator for Subaru Observatory where he's been since March of 2011. He got his Bachelor's of Science degree in 2007 from the University of Hawaii – Hilo where he majored in Astronomy, and minored in Physics and Mathematics. Since graduating he has spent a significant amount of his time above an altitude of 9,000 ft. in various facets – as a volunteer and then Interpretive Guide at the Visitor Information Station on Mauna Kea (9,100 ft.), a Telescope Operator for the AMiBA Observatory on Mauna Loa (~11,100 ft.), and now as a Telescope Operator on the “proper” mountain, Mauna Kea (13,800 ft.). As a long time regular on Mauna Kea he has enjoyed eating copious amounts of ice cream at the mid-level facility.



**Gregory Wirth**

**W.M. Keck Observatory**

**Contact: [wirth@keck.hawaii.edu](mailto:wirth@keck.hawaii.edu)**

**Greg Wirth** is a support astronomer at the W. M. Keck Observatory, specializing in optical and multi- object spectrographs. Greg started out in Michigan and has followed a path of westward migration ever since, including stops in Evanston, Illinois, for his undergraduate education in physics, astronomy, and applied math, in Santa Cruz, California, where he earned a Ph.D. in Astronomy and Astrophysics, and in Victoria, B.C., for a postdoctoral stint with the CNOC2 redshift survey team. In 1998 he joined the Keck staff and currently lives in Waimea with his wife and three “unschooled” kids, Amelia, Eli, and Maisie. Greg credits the members of his local astronomical club in Michigan with fostering a lifelong interest in astronomy, and he is happy to “pay it forward” by sharing the wonders of the Universe with students through the Journey Through the Universe program, and various outreach activities at Keck Observatory.





**Matthew Wung**

**Subaru Telescope**

**Contact: [wung@naoj.org](mailto:wung@naoj.org)**

**Matt Wung** is an Instrument Technician at the Subaru Telescope. He graduated from Waiakea High School in 2002, and then from Hawai'i Community College in 2005 with an A.A.S. in Electronics Technology. Originally hired as a student in 2005, he joined the Instrument Division and assisted the Adaptive Optics team for about a year. In 2006, he moved to O'ahu to pursue Electrical Engineering. Then in 2008, he was recalled by Subaru to once again assist the Adaptive Optics team, and this time, decided to stay on as a technician. After a stint on Daycrew, he joined the Instrument Group in 2011.



**Robert Wyman**

**Gemini Observatory**

**Contact: [rwyman@gemini.edu](mailto:rwyman@gemini.edu)**

**Robert Wyman** is from Saratoga, California. He obtained a B.S. in Mechanical Engineering at Cal Poly University in San Luis Obispo, California, and is currently an Instrumentation Engineer at Gemini Observatory in Hilo. He works on opto-mechanical systems and lasers for observatory operations. He also worked for many years in semiconductor processing equipment design and development in Palo Alto, California, and prior to that as a machinist and aerospace worker in the Santa Clara Valley. He says "Participating in the *Journey through the Universe* program and working with the kids was a fantastic experience. Their eager open minds are very inspirational."



## **Sylvana Yelda**

**University of California Los Angeles**

**Contact: [syelda@astro.ucla.edu](mailto:syelda@astro.ucla.edu)**

**Sylvana Yelda** is a postdoctoral researcher in the Galactic Center Group at UCLA. She took somewhat of an untraditional academic path, first getting a Bachelor's degree in Psychology from the University of Michigan in 2002, and then deciding to switch fields and take up Astronomy. She received her Ph.D. in Astronomy at UCLA in 2012. In her current role, Sylvana studies the dynamics of stars orbiting the supermassive black hole at the center of the Milky Way in order to understand how they formed in this hostile environment. She is also conducting a study on the expected performance of the future Thirty Meter Telescope's first-light instrument, IRIS, using simulated images of the Galactic center. Aside from Astronomy, Sylvana likes to run, play beach volleyball, and snowboard.