

<u>Andy Adamson</u> Joint Astronomy Centre Contact: <u>a.adamson@jach.hawaii.edu</u>

Andy Adamson is currently Associate Director of the United Kingdom Infrared Telescope (UKIRT). British by birth, before arriving on the Big Island 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 (hydro)carbons 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.

<u>Riley Ceria</u> Caltech Submillimeter Observatory Contact: <u>rceria@submm.caltech.edu</u>

Riley Ceria was born and raised in Hilo, Hawai'i. He attended Waiakea High School, and then went on to UH Manoa, where he received his Bachelor of Science in Electrical Engineering. While in Manoa, he got interested in robotics after participating in the Micromouse competitions for three years. After graduation he got a job as an Assistant Research Engineer for the Caltech Submillimeter Observatory. At his job, he works on various projects from programming, to testing electronic circuit boards. He is also active in doing outreach, as he enjoys teaching robotics at Waiakea High School.





<u>Richard Chamberlin</u> Caltech Submillimeter Observatory Contact: <u>cham@submm.caltech.edu</u>

Richard Chamberlin has been the Manager of the Caltech Submillimeter Observatory (CSO) on Mauna Kea, Hawai`i, since 1996. As a post-doctoral researcher at Boston University, he worked on developing and deploying a submillimeter radio telescope to the South Pole in the 1990's. To support site survey and astronomy efforts from the South Pole, Richard made seven trips to Antarctica between 1992 and 2001. In 1995 he

"wintered over" with the telescope he helped develop for use there. He is a graduate of the physics programs at the Massachusetts Institute of Technology (Ph.D. 1991), and the University of California at Santa Barbara (B.S., 1984). Prior to attending college, he was enlisted in the U.S. Air Force from 1975 to 1979, and he served in Montana and in Turkey as a weather observer. As CSO Manager, much of his work time is absorbed by administrative and telescope engineering activities but he is still active in research. He is currently participating in efforts to use the CSO antenna in a galactic plane survey to identify and study sites of new star formation. Past research efforts have included studying trends in atmospheric water abundance over the South Pole and evaluating the suitability of ground-based sites for submillimeter astronomy. When not at work he likes to participate in sports such as sailing, bicycling, motorcycling, and swimming. In 1999 he sailed his 29-foot sloop "Hokulani" 2100 miles from Richmond, California, to Hilo.

Paul Coleman UH Institute for Astronomy Contact: gruff@IfA.Hawaii.Edu

In the early 70s, **Paul Henry Ikaika Coleman** left his birthplace in Hawai'i to attend the University of Notre Dame. There he obtained a B.S. in physics and began an almost 30-year journey throughout the world before returning to Hawai'i to live. In graduate school, Paul studied philosophy and physics, decided to major in physics, and earned both the M.S. and Ph.D. degrees in astrophysics from the University of Pittsburgh. He was supported in graduate school by a Zacheus Daniels fellowship - awarded for promising astrophysical research. He also received a university



award for Excellence in Teaching. For the last two years of his thesis research, he was appointed to a junior research associate position with the National Radio Astronomy Observatory in Charlottesville, Virginia. From there, Paul accepted a visiting assistant professorship for a year at Virginia Tech and then moved to a position as a postdoctoral research associate with the Kapteyn Astronomical Institute in The Netherlands. After his post-doc, he stayed on staff at the Institute and took a two-year position with the Sterrewacht (Observatory) in Leiden. He and his wife Dianne remained in The Netherlands for eight years. Upon returning to the U.S., Paul took an assistant professorship at New Mexico Tech for two years. He was then invited to work at Yale for a year with Benoit Mandelbrot, the originator of fractal mathematics. From there, Paul was an associate professor at the University of Puerto Rico, and an adjunct staff member of the Arecibo Radio Telescope. Finally, in 2002, Paul was hired as an associate astronomer at the Institute for Astronomy (IfA) at UH Manoa. Paul teaches introductory astronomy on the Manoa campus. He is also project scientist on the Faulkes Telescope North, the world's largest telescope dedicated to \bar{K} -12 students in England and the state of Hawai'i. Since returning home, Paul has become involved in Native issues and is trying to play catch-up with cultural concerns. He is a member of UH Manoa's Kuali`i Council, a body of Native Hawaiian professors, instructors, and graduate students. As a Native Hawaiian, he is a natural role model for kids in Hawai'i. He attends career days all over the islands and is part of the IfA's new outreach program. Paul hopes to increase Native Hawaiian involvement at all levels in the excellent astronomy effort in Hawai'i. In the little spare time he has, he enjoys playing with his beautiful daughters, Hali'a and Nohea.



Al Conrad W.M. Keck Observatory Contact: <u>aconrad@keck.hawaii.edu</u>

As a support astronomer at the W.M. Keck Observatory, **Al Conrad** conducts research, provides support to visiting astronomers, and develops software to improve observing efficiency. His professional goal is to make groundbreaking discoveries in astronomy, particularly in planetary science, through direct research and by providing innovative and reliable software systems. He enjoys sharing his research, the morphology and dynamics of large asteroids, as well as sharing general information about the Solar System through public talks and school visits.

<u>Richard Crowe</u> UH Hilo Physics & Astronomy, `Imiloa Astronomy Center of Hawai`i Contact: <u>rcrowe@hubble.uhh.hawaii.edu</u>

Richard Crowe, Professor of Astronomy at UH Hilo since 1992, and Astronomer-in-Residence at the `Imiloa Center of Hawai`i since 2006, 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. At CFHT, he had scientific responsibility for the high-resolution spectrograph, and supported guest observers. Since coming to UHH in 1987, his teaching responsibilities have ranged from introductory physics and astronomy to senior level astrophysics and quantum mechanics. Richard's main research interests are in the



areas of pulsating stars, stellar evolution and spectroscopy. He has also published a dozen scholarly articles in science education and criticism of pseudoscience. In 1991, Richard was selected as a Fujio Matsuda Fellow of the University of Hawai'i for his scholarly work. He was Chair of the UHH Physics and Astronomy Department from 1992-2002, and was Principal Investigator on the *New Opportunities through Minority Initiatives in Space Science (NOMISS)* grant funded by NASA (2001-2004), a program designed to encourage local and Hawaiian students from K-16 to enter careers in space science by integrating astronomy with Polynesian skylore, voyaging, and Hawaiian culture. He and Alice Kawakami won City Bank's 2001 *TIGR Award* for astronomy outreach efforts, and in 2005, he and Pascale Pinner won Astro Day Excellence in Teaching Awards. Richard has given over 50 StarLab and other presentations in public and private schools in the last 5 years, and had the privilege of receiving voyaging canoe (the Wa`a Makali`i) training. Richard also regularly trains student observers using the UH 24-inch telescope atop Mauna Kea. In 2002, he completed a new revised version of the popular book **Stars Over Hawai`i**. Richard is very active in *Rotary;* he is currently President-Elect of the *Rotary Club of Hilo Bay*. He has played clarinet with the Hawai'i County Band for 18 years. He also sings in Kanilehua Chorale with his wife of 21 years, Deby, whom he met while they sang in the Waimea Chorus, and performed together in musicals in Waimea/Kona from 1985-87. Younger daughter Jasmine (16) sings, dances, plays violin, and is currently recording a CD of her own songs, while older daughter Ginger (19) is a talented artist and dancer.



<u>Chris Davis</u> Joint Astronomy Centre Contact: <u>c.davis@jach.hawaii.edu</u>

Chris Davis is a Staff Astronomer at the United Kingdom Infrared Telescope (UKIRT) in Hawai'i. Brought up in Yorkshire, England, Chris graduated from the University of Edinburgh in Scotland and worked as a research scientist in Germany and Ireland before moving to the Big Island with his wife, Caroline, and two kids, Tom and Emma, in 1997. He spends much of his time helping UKIRT's visiting astronomers develop and execute their observing projects, though he also conducts his own research, having authored or co-authored over a hundred science articles since he graduated in 1992. Using UKIRT and other

telescopes in Hawai`i and elsewhere around the world, he studies the physics and chemistry of spectacular jets of gas produced by very young, but also very old, stars. These jets can travel at millions of miles an hour, and reach a light year or more in length. When not studying the stars, Chris is usually not far from a soccer field. He plays regularly in Hilo's over-35s Makule Soccer League, and has coached his daughter's American Youth Soccer Organisation (AYSO) team in Hilo. He also enjoys reading, gardening and playing the odd video game - Chris and his family are hoping to get a Wi`i in the near future!

<u>Scott Fisher</u> Gemini Observatory Contact: <u>sfisher@gemini.edu</u>

Scott Fisher is a staff scientist at the Gemini Observatory where he splits his time between instrument support, scientific research, and outreach to the public and the scientific community. Scott obtained his Ph.D. from the University of Florida (UF) 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. We believe that our own planetary system formed out of such a disk approximately 4.6 billion years ago. Scott is also involved with the design, construction, and use of thermal-infrared camera systems that are used on the biggest telescopes in the world. Scott moved to Hilo directly after graduation from UF in early 2001 and has been working at Gemini ever since. He has spent approximately 200 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 avid amateur photographer and a hopelessly addicted Geocacher. When he is not on-island Scott can often be found in Las Vegas, Monte Carlo, or any city with a nightlife full of bright neon lights, poker cards, and casino chips!

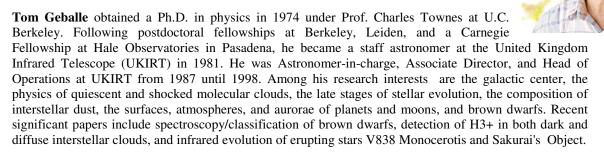




Gary Fujihara UH Institute for Astronomy Contact: <u>fujihara@IfA.Hawaii.Edu</u>

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. 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.

<u>Tom Geballe</u> Gemini Observatory Contact: tgeballe@gemini.edu





<u>Kevin Grazier</u> Jet Propulsion Laboratory Contact: kevin grazier@yahoo.com

Kevin Grazier is a planetary scientist at NASA's Jet Propulsion Laboratory (JPL). He did his doctoral research in planetary physics at UCLA, performing long-term large-scale computer simulations of early Solar System evolution. He started at JPL in 1995 as an academic part-time student, finishing his Ph.D. dissertation in 1997. At JPL, Kevin has written mission planning and analysis software that won JPL-wide and NASA-wide awards. He currently holds the dual titles of Investigation Scientist and Science Planning Engineer for the Cassini/Huygens Mission to Saturn and Titan. Kevin also continues research involving computer simulations of Solar System dynamics, evolution, and chaos with collaborators at UCLA, Los Alamos National Laboratory, Purdue

University, and the University of Auckland, New Zealand. In addition to his JPL duties, Kevin teaches classes in basic astronomy, planetary science, cosmology, and the search for extraterrestrial life at UCLA and Santa Monica College. On a lighter note, Kevin currently serves as the science advisor for the PBS educational animated series The Zula Patrol, and also for the SciFi Channel series Battlestar Galactica.

John Hamilton UH Hilo Physics & Astronomy Contact: jch@hawaii.edu

John Hamilton grew up in Hawai'i, and was a graduate of Aiea High School on O'ahu. He then went to the mainland and graduated from the University of Texas @ Austin with an Honors B.S. in Physics and an Honors B.A. in Astronomy. John returned to Hawai`i and finished his graduate work at UH Manoa with an M.S. in Astronomy. For 26 years, John worked on Mauna Kea at several observatories: NASA IRTF-3.0m, Canada-France Hawai'i-3.6m, and Gemini-8.0m. During the last four years, John has been teaching for UH Hilo Physics and Astronomy, and is Department Chair for Spring 2007. His areas of interest are galaxies & cosmology, neutrino particle physics, and asteroids.







Janice Harvey is the Education and Outreach Specialist for Gemini Observatory. Janice is the local team coordinator and leader of the Journey through the Universe program. She is also the National Team Site leader for the Family Astro program in Hawai'i and serves as a StarLab instructor and trainer. 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@subaru.naoj.org

Saeko Hayashi received her Doctor of Science from the University of Tokyo. Her current position is Associate Professor, Subaru Telescope, National Astronomical Observatory of Japan. Saeko used to coordinate the day crew work shifts for the telescope. Currently, she manages public information and outreach efforts at Subaru Telescope, including the summit facility tours. Her main research pursuit is the formation process of stars and planets. She hopes to discover earth-like objects outside of the solar system.



Inge Heyer Joint Astronomy Centre Contact: i.heyer@jach.hawaii.edu

Inge Heyer was born and raised in Berlin, Germany. She completed her secondary education there, after which she accepted a scholarship to attend Tenri University in Tenri, Japan. Following a life-long dream she studied martial arts and the Japanese language, and travelled extensively in that fascinating country. After this two-year academic "detour" she decided to follow her interest in astronomy (fuelled by watching way too much Star Trek in high school), and came to the U.S. to pursue an undergraduate degree at Smith College in Massachusetts. With a B.A. in physics and astronomy, Inge then attended the University of Hawai`i at Manoa, where she obtained a master's degree in astronomy, and pursued many years of research, which often took her to the observatories atop beautiful Mauna Kea. From 1992 to 2005, Inge was a senior data analyst at the Space Telescope Science Institute in Baltimore, working on images obtained by the Hubble Space Telescope's Wide-Field and Planetary Camera 2 (WFPC2) as well as the Advanced Camera for

Surveys (ACS). Space Telescope has a very active educational and public outreach program, in which Inge participated as a volunteer. Still watching way too much Star Trek and also Babylon 5, Inge became involved in Baltimore-Washington Science Fiction activities. She gives presentations about astronomy and space science at conventions throughout the nation and Europe. She has also done this for schools of all levels, libraries, and community groups. In March of 2006, Inge moved back to Hawai'i to lead the outreach efforts for the Joint Astronomy Centre in Hilo. She is looking forward to visiting all the Big Island schools and community groups to talk about the exciting astronomy work on Mauna Kea. And in case you were wondering how the Hubble Space Telescope images got into some episodes of Babylon-5 and Star Trek, you're looking at the trouble-maker who instigated this!

<u>Catherine Ishida</u> Subaru Telescope Contact: <u>cat@subaru.naoj.org</u>

Catherine Ishida grew up in Tokyo, New York, and London, which is why she studies astronomy. After moving from city to city, she decided that learning about things that are true everywhere in the Universe might be a good strategy. In fourth grade, she went camping in the countryside and had a chance to stay up late. Seeing the beauty of the night sky undiluted by city lights filled her with wonder and reaffirmed her earlier decision. As an astronomer, Catherine has been studying collisions of galaxies and how they lead to the birth of stars. Living in Hilo makes it easy for her to pursue many of her interests, which include day dreaming about being a country girl. Catherine obtained her undergraduate degree in physics and astronomy from Yale University in 1993 and her graduate degree in astronomy from the University of Hawai'i at Manoa in 2004. She has given presentations to people of all ages on topics ranging from the distance scales in the Universe to the connection between science and optimism.





<u>Ryoko Ishioka</u> Subaru Telescope Contact: <u>ishioka@subaru.naoj.org</u>

Ryoko Ishioka is a research fellow at the Subaru Telescope. She grew up in Hiroshima, Japan, and started astronomical study at Kyoto. Ryoko moved to Hilo in 2005, just after finishing her Ph.D. Her research subject is about a special type of variable star called cataclysmic variables. These objects change their brightness on time scales from seconds to years and some of them become 100 times brighter than their normal brightness. Such changes can be detected by small telescopes or binoculars (or sometimes even by unaided eyes). So not only professional but also many amateur astronomers are observing cataclysmic variables. Their variation is interesting - Ryoko doesn't get tired of observing them!

Scot Kleinman Subaru Telescope Contact: sjnk@subaru.naoj.org

Scot (there was a shortage of "t"s when he was born) **Kleinman** is an astronomer at the Subaru Telescope. There, he runs the Instrument Division, helping to maintain, commission, and support the suite of instruments which actually look at and analyze the light collected by the Subaru telescope's large mirror. Scot also likes to design and build new instruments. 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.





Ron Koehler

Mauna Kea Support Services Contact: koehler@IfA.Hawaii.Edu

Ron Koehler graduated from Loyola University (Chicago) in 1967 with a B.S. in Chemistry. He taught chemistry at St. Louis High School in Honolulu from 1969–1979. After that, he was a telescope operator at the NASA Infrared Telescope Facility (NASA IRTF). Following a 3-year stint as operator, he became the superintendent of NASA IRTF and remained at that position until 1992. Since then, he has been Manager of Mauna Kea Support Services (MKSS). Ron is the Water Polo Coach at Hilo High School (since 2000). He has the following perspective on science education for this program: "The focus of my presentation will be the value of science education for those students who

may not be interested in becoming professional scientists. I will use my own career as an example. To become a scientist, whom I will define as a Ph.D., requires an extraordinary combination of ability, interest, focus, and commitment that only a small percentage of students have. However, there is a very large group of students who can focus on a career in science without necessarily becoming a scientist. I was only an average student who focused more on athletics than classroom work. I decided to major in chemistry mostly because science was interesting. After graduation, I became a science teacher. From there, my science background led to a career with the observatories on Mauna Kea. I primarily consider myself an educator, even as my career has evolved into project management. Besides 12 years of classroom work, I have coached a variety of sports for over 25 years. My goal as a coach and teacher is to provide a life changing experience that our young people can carry with them in the difficult world they will be facing."

Joe Masiero UH Institute for Astronomy Contact: masiero@IfA.Hawaii.Edu



Joe Masiero is currently a third-year graduate student at the University of Hawaii's Institute for Astronomy, working toward his Ph.D. He was born and raised in Randolph, N.J., and completed a bachelor's degree in Astronomy and Astrophysics at Pennsylvania State University in 2004. He is currently researching how asteroid rotation correlates with size, composition and orbit. He plans on using polarized light to explore the surface properties of Main Belt and Near-Earth asteroids, and see how these properties vary with rotation. Joe is also organizer of the Graduate Education and Public Outreach Committee (GEPOC), a group of graduate students who perform volunteer outreach presentations for local schools and organizations. Presentations range from StabLab planetarium shows for classes of 10 to talks or star parties for groups of over 100. In his free time, Joe enjoys aikido, fire twirling, flying, baking bread, and hiking.



<u>Satoshi Mayama</u> Subaru Telescope

Contact: mayamast@subaru.naoj.org

Satoshi Mayama obtained his Bachelor's degree in 2002, and his Master's degree in 2004, at Waseda University, School of Science and Engineering. He then spent 3 years in the Optical and Infrared Astronomy Division, at the National Astronomical Observatory of Japan. He has now been based at the Subaru facility in Hilo for 20 months. His research group is working on direct detection of young exo-planets and understanding how stars and planets form. Like others, he is interested in finding an earth-like planet in the future. By talking about current research of star and planet formation conducted with the Subaru Telescope, Satoshi wants to share his interest and enjoyment of astronomy with students.

Peter Michaud Gemini Observatory Contact: 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 7 employees since 1998 and he continues to expand the impact of Gemini's Public Information and Outreach programming locally, nationally and world-wide.





Julie Rivera W.M. Keck Observatory Contact: jrivera@keck.hawaii.edu

Julie Rivera 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 stop 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 and she looks forward to participating in another great year.

Steven Rodney UH Institute for Astronomy Contact: srodney@hawaii.edu

Steven Rodney is in his 4th year at the Institute for Astronomy, pursuing a Ph.D. with Dr. John Tonry on the study of "Type Ia Supernova Progenitors." Steve is from Cleveland, Ohio, and received his B.S. in Physics and Astronomy at Cleveland's Case Western Reserve University, with a minor in Japanese. In 2003 he was awarded a Graduate Research Fellowship from the National Science Foundation, supporting his first 3 years of research and study at the IfA. Currently, he is working on a grant from the Space Telescope Science Institute for Hubble Space Telescope archival research. When not holed up writing code and sifting for supernovae, Steve enjoys football, surfing, and traveling with his wife Megan.





<u>Hiroko Shinnaga</u>

Caltech Submillimeter Observatory Contact: shinnaga@submm.caltech.edu

Hiroko Shinnaga is a staff scientist at California Institute of Technology Submillimeter Observatory (CSO). She obtained a Doctor of Science at Ibaraki University (Institute of Astrophysics and Planetary Sciences) in Japan. Her thesis work included the development of a wide millimeter band polarimeter, and polarimetric observations using the instrument with the 45meter telescope, done at the Nobeyama Radio Observatory, a division of the National Astronomical Observatory of Japan. Following postdoctoral research fellowships at the Submillimeter Array project at Academia Sinica Institute of Astronomy and Astrophysics (ASIAA) in Taiwan and at Harvard-Smithsonian Center for Astrophysics (CfA) in the U.S., she

became a staff scientist at California Institute of Technology Submillimeter Observatory (CSO) in 2004. Her research interests include submillimeter/millimeter astronomy, polarimetry, interferometric imaging observations and techniques, cosmic maser, late stages of stellar evolution, early phases of star formation, studies of interstellar, circumstellar, and stellar magnetic fields.

<u>Tim Slater</u> University of Arizona Contact: <u>tslater@as.arizona.edu</u>



Timothy F. Slater is Associate Professor of Astronomy at the University of Arizona where his scholarship focuses on the teaching and learning of science. He is the Director of the Conceptual Astronomy and Physics Education Research (CAPER) group in the Astronomy Department. His research focuses on student conceptual understanding in formal and informal learning environments, inquiry-based curriculum development, and authentic assessment strategies, with a particular emphasis on non-science majors and pre-service teachers. Most semesters, you can find him in a giant lecture hall teaching astronomy to 300 non-science-majoring students at a time. He also teaches science teaching methods courses for future teachers. Tim earned his Ph.D.

at the University of South Carolina in geophysics and his M.S. from Clemson University in astrophysics. He holds two bachelors' degrees from Kansas State University, one in science education and one in physical science. He has extensive experience working with teachers and students in Hawai'i and works closely with programs at the UH Institute for Astronomy. Tim is the elected education officer for the American Astronomical Society, an elected member of the Board of Directors for the Astronomical Society of the Pacific, an elected councilor-at-large for the Society of College Science Teachers, is on the Editorial

Board of the Astronomy Education Review, and has served multiple terms as chairman of the Astronomy Education Committee of the American Association of Physics Teachers. He represents the United States as the U.S. National Chairman of the 2009 International Year of Astronomy. He is an author of more than 70 refereed articles, winner of numerous awards, and is frequently an invited speaker on improving teaching of science through educational research and teacher education.

Walter Steiger Caltech Submillimeter Observatory Contact: steiger@hawaii.edu

Walter Steiger is Professor Emeritus of Physics and Astronomy at the University of Hawai'i at Manoa. During his 30-year career at Manoa, he began an astronomy program and developed a solar observatory at Makapu'u Point on Oahu, which later was supplanted by one on Haleakala, Maui. On Haleakala he conducted studies of the airglow and zodiacal light. After an early retirement in 1980, he entered a new form of teaching at the Bishop Museum Planetarium. During this period he also served for four years on the UH Board of Regents. In 1987, looking for another new challenge, he was offered the opportunity to work on Mauna Kea as Site Manager for the Caltech Submillimeter

Observatory. After retirement from CSO, he was back to his first love of teaching physics, this time at UH-Hilo, as Adjunct Professor in the UHH Department of Physics and Astronomy. He now talks and writes about the origins of astronomy in Hawai`i, and also helps CSO with its outreach program.

<u>Michihiro Takami</u> Subaru Telescope Contact: mtakami@subaru.naoj.org

Michihiro Takami was born and grew up in Japan, lived in England for six years, then moved to this beautiful island just two years ago. He has worked as an astronomer for more than ten years, and his tasks here are to help the visiting astronomers at Subaru Telescope, keep one of the instruments (namely "adaptive optics") in good condition, and do research to try to understand how stars and planets are born. In his spare time, Hiro plays Tahitian drums, practices ukulele, and surfs. He is sometimes involved in public events - giving a talk, attending a panel discussion, etc. He always finds that people in Hawai`i are so nice and friendly, and lucky us, the sky at night is so beautiful! Hiro hopes to see you in your classroom and to share his excitement with you.





Kumiko Usuda Subaru Telescope Contact: <u>kumiko@subaru.naoj.org</u>

Kumiko Usuda is a Japanese astronomer. Before she moved to Hilo in 1998, she visited Chile in South America and Mauna Kea in Hawai'i to carry out astronomical observations. Her research deals with studying gas in the Milky Way, our Galaxy. Now she works at Subaru Telescope, the Japanese optical-infrared telescope on Mauna Kea, as an outreach scientist. After she moved to Hilo, she gave birth to two children, a seven-year-old girl and a four-year-old boy. Kumiko loves to talk astronomy to K-12 students or to preschoolers both in Hawai'i and in Japan. In the last 1.5 years, she has visited 11 schools and 76 classrooms in the Hilo vicinity, and about 1,500 students enjoyed her presentations. Kumiko likes to do hands-on workshops at Ellison Onizuka Science Day (grades 4-10) and the Math-Science

Conference for grade 7 girls. Please visit the URL <u>http://www.naoj.org/staff/kumiko</u> for more information.



<u>Watson Varricatt</u> Joint Astronomy Centre Contact: <u>w.varricatt@jach.hawaii.edu</u>

Watson P. Varricatt obtained his Ph.D. in Astronomy from the Physical Research Laboratory, Ahmedabad, India. He is currently working as a Support Astronomer with the United Kingdom Infrared Telescope, Hawai'i. His research interests include early and late stages of evolution of massive stars, eclipsing binary stars, and infrared astronomy.



Kevin Volk Gemini Observatory Contact: kvolk@gemini.edu

Kevin Volk is an astronomer at Gemini Observatory. He obtained his Ph.D. at the University of Calgary in 1986. His main research interests are the observational and theoretical study of planetary nebulae and of the dust shells around evolved stars. Before joining Gemini Observatory in early 2003, he held various post-doctoral positions, mostly for the support of satellite missions ranging from X-ray astronomy through the mid-infrared wavelengths to the submillimetre wavelength range. He has a general interest in spectroscopy at all wavelengths and all resolutions for use in classification of different objects, and to shed light on the physical processes of stars and their surroundings.

Virginia Volk Contact: vvolk@iras.ucalgary.ca

Virginia Volk received a B.Sc. from the University of Toronto and M.Sc. from the University of Calgary, both in Physics and Astronomy. Her principal interest is in pulsating variable stars, especially multi-frequency pulsators called delta Scuti stars. Stars somewhat more massive than the sun go through a phase late in life in which their interior layers become unstable and expand and contract periodically. These are evident as regular oscillations, or waves, traveling across the surface of a star and changing its physical properties, such as the star's brightness. By observing the (often complicated) oscillation patterns, we learn about the physical processes at work within the star, and the star's interior properties. Virginia very much enjoys speaking with people about astronomy. She has given presentations and led astronomy activities for school children and



Scouting/Guiding groups, at observatory open houses, and with the Royal Astronomical Society of Canada.



Gregory Wirth W.M. Keck Observatory Contact: gwirth@keck.hawaii.edu

Greg Wirth was raised in Michigan and became interested in astronomy despite living in one of the cloudier places on our planet! He studied physics, astronomy, and applied math at Northwestern University and earned a Ph.D. in Astronomy and Astrophysics from the University of California, Santa Cruz. For the last 8 years he has been an astronomer at the W. M. Keck Observatory, which operates the world's two largest optical telescopes on the summit of Mauna Kea. He currently lives in Waimea with his wife, three young children, a cat and three chickens. Greg credits

the members of his local astronomy club with nurturing a lifelong interest in astronomy, and he is happy to repay those mentors by sharing the wonders of the Universe with students and enthusiasts everywhere.

