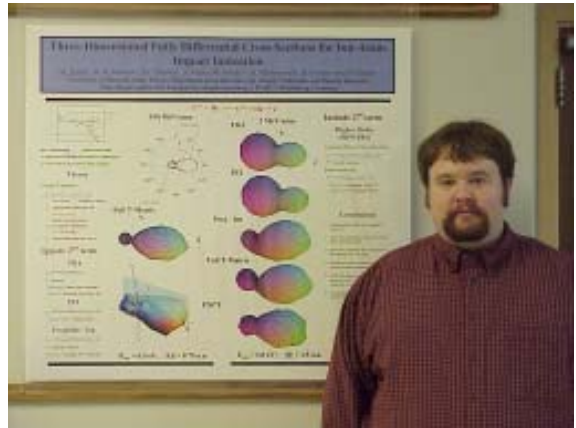


Matt Foster wins Sigma Xi Poster Competition

Physics graduate student **Matt Foster** received first place in the campus-wide Sigma Xi Engineering and Scientific Posters Competition, held at the Winter 2003 Graduation Jubilee last December. Matt began his studies at UMR as an undergraduate in the fall of 1998. His research experience started in the summer of 1999 when he worked for **Don Madison** on theoretical atomic physics. Matt received his BS degree in Physics from UMR in August, 2002 and decided to continue his studies and research at UMR as a graduate student. In December of 2003, he was selected as a finalist and third place winner in the 10th Annual **Laird D. Schearer** Prize competition. Matt plans to get both his MS and PhD degrees at UMR.

Matt has found his research with Dr. Madison in the field of heavy-ion impact ionization to be very rewarding. He has collaborated with different groups around the world including a group at the Max-Planck Institut für Kernphysik in Heidelberg, Germany which performs many of the experiments directly related to Matt's work. The state-of-the-art theoretical models that Matt uses can take a day or more to produce a single number so he is always searching for idle computers. Matt says "I have been very fortunate to have worked with Dr. Madison since my days as an undergraduate. The opportunity has allowed me to be on many journal articles including a Physical Review Letter in December, 2003. I look forward to obtaining my degree and moving on to do more scientific research in atomic physics." So far, Matt has been a co-author on 7 refereed research papers and 9 papers presented at meetings.



Sandra Magnus Receives Professional Degree at Spring Commencement

At the last Spring Commencement, UMR Physics Alum **Sandra Hall Magnus** (BS '86) was awarded the Professional Degree in Physics, in honor of her activities as a NASA astronaut, and in recognition of her recent trip aboard the space shuttle Atlantis. Magnus, who has also been chosen to receive the 2003 UMR Alumni Association Young Alumna award, is a 1996 graduate of the UMR physics department. After receiving her BS degree in Physics, she received an MS degree in electrical engineering in 1990. She spent the first several years of her career at McDonnell Douglas, conducting research and

development on stealth radar signature reduction techniques and on the propulsion system for the Navy A-12 Attack Aircraft program. In 1996, after earning her PhD from the School of Material Science and



Engineering at Georgia Tech, she was selected by NASA to become an astronaut and is now based at Johnson Space Center in Houston, Texas. She has worked in various roles at NASA, including an assignment as a "Russian Crusader" to support technical exchanges with the Russian space program and activities related to the International Space Station. Her first

space flight was STS-112 in October 2002 on the shuttle Atlantis.

While on campus to receive her degree, Dr. Magnus presented the physics department with a UMR banner that she brought with her on the space shuttle, along with a plaque commemorating flight STS-112. The department is very proud to display the banner and the plaque in tribute to the courage and spirit of the members of the U.S. space program.



To Contact UMR Physics

If you would like to contact us for any reason, you can reach us by phone at (573) 341-4781 and by e-mail at physics@umr.edu. You might also be interested in checking out our web page, <http://www.umr.edu/~physics>.