

# South Dakota Space Days 2006

**“The Moon, Mars & Beyond”**

October 17 & 18, Pierre, South Dakota  
Hosts: SD Discovery Center,  
SD Space Grant Consortium, NASA

With support from:  
Jim Peitz Aerosports, Inc. • Abbott Carlson Wagonlit Travel • First National Bank





SD Space Days is an annual public outreach project of the South Dakota NASA Space Grant Consortium  
<http://www.sdsmt.edu/>

# SD Discovery Center & Ramkota RiverCenter Pierre, SD



## NASA ASTRONAUT MICHAEL E. FOSSUM, KEYNOTE SPEAKER

Astronaut Fossum served as a Mission Specialist on the 13-day flight of the crew of Space Shuttle Discovery in July 2006. The mission started with the first ever Independence Day launch of a space shuttle. Fossum and Pier Sellers performed 3 extravehicular activities, totaling 21 hours, to test the 50-ft. robotic arm boom extension.

Fossum was born in Sioux Falls, SD and grew up in McAllen, TX. As a teen he earned the rank of Eagle Scout and Vigil Member of the Order of the Arrow in Boy Scouts. He is still a scout leader. He has earned degrees in mechanical engineering, systems engineering and physical science (space science). He is a graduate of the US Air Force Test Pilot School. He is currently a Colonel in the Air Force Reserves. He has logged over 1000 hours flying in 34 different aircraft.

### Additional Speakers:

#### NASA Astrophysicist Theodore Gull

Ted Gull grew up in South Dakota. He is a graduate of MIT, Cornell and Loyola College. He works in the Extraterrestrial Planets and Stellar Astrophysics office of the Astrophysics Science Division of NASA's Goddard Space Flight Center. The Astrophysics Science Division (ASD) studies such questions as: How do galaxies, stars, and planetary systems form and evolve? What is the diversity of worlds beyond our solar system? Which planets might harbor life? What powered the big bang? What is the nature of the mysterious Dark Energy that is pulling the universe apart? What happens to space, time and matter at the edge of a black hole? What are the cycles of matter & energy in the evolving universe?

#### Jessica Weidenbach, SD Space Grant Fellow

Jessica Weidenbach is a student at the SD School of Mines & Technology studying Computer Science and Applied Computational Mathematics. Jessica's interest in space science started when she attend Aviation Careers Education Camp at SD State University. The following summer she was selected to attend NASA's Advanced Academy Space Camp in Huntsville, AL. Currently she has an undergraduate fellowship from the SD Space Grant Consortium. Jessica hopes, one day, to work as a computer scientist for NASA.



#### Thomas Durkin, Deputy Director and Outreach Coordinator of the SD Space Grant Consortium

Tom Durkin is Deputy Director and Outreach Coordinator of the NASA South Dakota Space Grant Consortium, headquartered on the campus of South Dakota School of Mines & Technology (SDSM&T). Tom works in the Office of Research Affairs at SDSM&T. His duties consist of directing and coordinating educational and research activities associated with NASA's Space

Grant in South Dakota. This includes giving presentations on NASA's many unique missions and inspiring students of all ages to pursue education in science, math, engineering and technology. Tom holds degrees in Biology, Earth Science and Geology. His Space Day talk is on the Mars Rover.

#### Ron Dyvig, Founder, Badlands Observatory

As a young man living in the exciting pre-Sputnik era of the mid-1950's, Ron Dyvig dreamed of becoming a professional astronomer. Ron is a graduate of Black Hills State University with majors in science, math and music. Throughout his adult life he's been an extremely active amateur astronomer. In fact, was president of the Black Hills Astronomical Society in 1960 when they completed construction of their Hidden Valley Observatory. He is the owner and founder of the Badlands Observatory in Quinn, SD.



### SD NASA SPACE GRANT MEMBERS & AFFILIATES

MANAGEMENT TEAM: South Dakota School of Mines & Technology, South Dakota State University, USGS/EROS Data Center, Augustana College, Sinte Gleska University, South Dakota Discovery Center

INDUSTRIAL AFFILIATES: Cynetics Corporation, Honeywell, Horizons, Inc., Raven Industries, RESPEC, Science Applications International Corporation (SAIC)

GOVERNMENT AFFILIATES: Office of Aeronautics of the SD Department of Transportation, National Weather Service Forecast Office of Aberdeen

EDUCATIONAL AFFILIATES: Black Hills State University (BHSU), BHSU Center for the Advancement of Mathematics & Science Education & NASA Educator Resource Center, University of South Dakota, Dakota State University, Badlands Observatory, Black Hills Astronomical Society, Imagination Station, Kirby Science Discovery Center and NASA Educator Resource Center, The Journey Museum, Lower Brule Community College, Oglala Lakota College, Lake Area Technical Institute, Teaching SMART of Girls, Inc.,

# Everyone is invited to SOUTH DAKOTA SPACE DAYS 2006

## October 17 & 18

### SCHEDULE OF EVENTS

#### All Events are FREE!

South Dakota Space Days are part of a national celebration of our quest to explore and utilize "The Final Frontier". The South Dakota Discovery Center will offer an array of FREE space and aeronautics activities for students and the public. Activities are sponsored by the South Dakota NASA Space Grant Consortium.

#### Opening Events – Tuesday, October 17

- 6 pm Aerial Acrobatics, Jim Peitz Aerosports, Inc., Missouri River Causeway. Tune to KCCR 1240AM
- 7 pm NASA Astronaut Mike Fossum, Keynote Speaker\*\*, Amphitheater I, Ramkota. TICKETS ARE FREE TO THE PUBLIC - While quantities last!
- 8:30 pm Star Party, Ron Dyvig, Founder of Badlands Observatory, Wakpa Sica, Hwy. 1804, North of Fort Pierre

#### Wednesday, October 18 –

##### Ramkota River Center

- 9am – 5pm Space Day Exhibits – Educational booths for 4th grade through adults.
- 9am - 5pm "Little Discoverers" Activity Room\* – Hands-on activities for P-k – 3rd grade.
- 9 am & 2 pm "I Want to Be a Space Cadet!" Opportunities & Funding Sources for Students\*. Jessica Weidenbach SD Space Grant Fellow
- 10am & 1pm NASA Astronaut Mike Fossum\*, Keynote Speaker
- 11am & 2pm NASA Astrophysicist Ted Gull\*
- 11am "Mars Rover"\*, Thomas Durkin, SD Space Grant Deputy Director
- Hourly Starlab Planetarium Shows\*

#### Wednesday, October 18 –

##### South Dakota Discovery Center

- 9am – 5pm EROS "Earth As Art" Exhibit
- Telescope Viewing of the Sun
- Starlab Planetarium Shows (hourly)\*

#### Wednesday, October 18 –

##### Pierre Indian Learning Center

- 7pm NASA Astronaut Mike Fossum, Keynote Speaker
- Public is invited to attend.

\*\* Limited seating is available. Tickets required. Pick-up at SD Discovery Center, 805 W. Sioux Avenue, Pierre between 1pm and 5pm weekdays/Sundays or 10am to 5pm Saturdays. Tickets are FREE.

\* Tickets required for groups. Teachers and Group Leaders, please e-mail [kristiemaher@sd-discovery.com](mailto:kristiemaher@sd-discovery.com) to reserve tickets.



### Register for Space Days today!

Call the SD Discovery Center at (605)-224-8295 or e-mail [kristiemaher@sd-discovery.com](mailto:kristiemaher@sd-discovery.com).  
 Due to limited space, all groups who wish to attend a scheduled starlab show or speaker must pre-register.  
 One teacher or adult chaperone is required for every 10 youth.