

Call for Papers

George H. Born Symposium

May 13-14, 2010

Boulder, Colorado

Abstract Deadline: March 1st, 2010

Honoring George Born's 70th birthday and the 25th anniversary of the Colorado Center for Astrodynamics Research.



George H. Born received the Ph. D. in Aerospace Engineering from the University of Texas at Austin in 1968. For over 40 years his research has contributed to the fields of precision orbit determination, interplanetary mission design, satellite navigation, and satellite oceanography. In 1970 he joined the Jet Propulsion Laboratory where he served on the navigation team of Mariner 9, was the Technical Group Supervisor in charge of the Mars orbit determination for the Viking missions, and served as the Geophysical Evaluation Manager for the Seasat Project. The Seasat spacecraft, which flew in 1978, carried the first suite of microwave instruments for monitoring the global oceans. As Geophysical Evaluation Manager, he was in charge of the efforts to demonstrate that the instrument package containing a radar altimeter, windfield scatterometer, synthetic aperture radar, scanning multichannel microwave radiometer, and a visual and infrared radiometer, met all specifications for measuring geophysical parameters over the ocean. These included sea surface topography, sea surface temperature, atmospheric water vapor, and ocean surface imaging. This body of work has led him to be selected as a member of the National Academy of Engineering, become a Fellow of the American Astronautical Society, receive the American Astronautical Society Dirk Brouwer Award, as well as receive the AIAA Mechanics and Control of Flight Award.

In 1985, he joined the Aerospace Engineering Sciences Department at the University of Colorado as a professor, and founded the Colorado Center for Astrodynamics Research (CCAR), which he directs. CCAR, which is enjoying its 25th anniversary this year, is a multidisciplinary center involving faculty, staff, and students from the Department of Aerospace Engineering Sciences. Its research program emphasizes astrodynamics, space mission design and satellite navigation, GPS technology development and applications, meteorology, oceanography, geodesy, and terrestrial vegetation studies with in situ and remote sensing data.

A special symposium will be held on May 13-14, 2010, in Boulder, CO on the University of Colorado campus, to honor Dr. Born for his many contributions to the field. This event is sponsored by the American Astronautical Society (AAS) and is open to everyone. The conference information includes:

General Chair: R. Steven Nerem (nerem@colorado.edu)

Technical Chairs:

Hanspeter Schaub (hanspeter.schaub@colorado.edu)

Dan Scheeres (scheeres@colorado.edu)

Conference Info: http://ccar.colorado.edu/born_symposium

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Presentations and papers are solicited on topics related to astrodynamics, including but not limited to:

- Artificial and natural space debris
- Asteroid and non-Earth orbiting missions
- Attitude dynamics, determination and control
- Dynamical systems theory as applied to space flight problems
- Dynamics and control of large space structures and tethers
- Earth orbital and planetary mission studies
- Flight dynamics operations and spacecraft autonomy
- Ocean remote sensing
- Orbit determination and space surveillance tracking
- Orbital dynamics, perturbations, and stability
- Rendezvous, relative motion, proximity missions, and formation flying
- Spacecraft guidance, navigation and control
- Trajectory / mission / maneuver design and optimization

The abstract deadline is March 1, 2010. A one-page abstract along with a short paragraph abstract (100 words or less for the program) are required. Abstract submission should be emailed to the technical chair Dr. Schaub at hanspeter.schaub@colorado.edu. Final manuscripts are required before the symposium. Journal-quality papers will be considered for publication in a special issue of the *Journal of Astronautical Sciences*.

The conference web site (http://ccar.colorado.edu/born_symposium) will list local hotel and registration information. Please contact the general chair regarding symposium questions.