*The heavens declare the glory of God; the skies proclaim the work of his hands.* –Psalm 19:1, NIV

# "Astronomy/Cosmology"

Colorado Christian University July 25–28, 2003

## Thursday, July 24

4:00 PMCheck-in and registration10:00 PMRegistration closes

#### Friday, July 25

7:30 AM	Breakfast
9:00 AM	Registration begins
	Field trips schedule
9:00 AM	<b>#1</b> – The Earth <i>Has</i> a History
	#2 – High Altitude Ecology
	#3 – National Center for Atmospheric Research
11:30 AM	Lunch
12:30 PM	#4 – National Renewable Energy Laboratory
	#5 – Red Rocks–Dinosaur Ridge
6:00 PM	Dinner
7:30 PM	Introductions and Opening Plenary Address
9:15 PM	Mixer

## Saturday, July 26

9:00 AM #6 – Spouses' Field Trip —Betty Ford Alpine Gardens

## Program Highlights, July 25–28

#### **Plenary Speakers:**

- Dennis Danielson —University of British Columbia, Associate Head of English; Editor, *The Book of the Cosmos: Imagining the Universe from Heroclitus to Hawking*
- Eilene Theilig—NASA Jet Propulsion Laboratory; Project Manager, Galileo Mission to Jupiter
- Alan Stockton—Institute for Astronomy, U of Hawaii and William Keel—U of Alabama, cutting-edge discoveries and studies with the Hubble Space Telescope
- Deborah Haarsma—Calvin College, Professor of Physics and Astronomy, Author, Speaker and Worship Musician
- Plus a panel of leading-edge researchers in astronomy and cosmology

#### **Special Sessions:**

- Our Faith and Science at Work and at Church
  - Panel Discussion on practical issues for following Christ as a scientist in the context of the laboratory, the classroom, and the local church
- Newest Discoveries in Astronomy and Cosmology
- Divine Action in Nature
  - Bioethics and Stewardship: Human Population and Global Climate Change
- Considering Earth as a Privileged Planet
- Technology Development from a Christian Perspective

#### Plus:

- Contributed Papers and Posters
- Meetings of the Affiliations, Commissions, Fellows, Local Sections, Publications, and Students and Early Career Scientists
- Reception for Students and Early Career Scientists

# Pre-meeting Field Trips, July 25

**1.** The Earth *Has* a History Geological Field Trip (20-person limit) \$10 p/p Leave CCU at 9:00 AM and return at 2:00 PM. Box lunch included with meal packages 1, 2, and 3. Bottled water provided.

This 5-hour trip provides a clear opportunity to see how simple geological relations in the spectacular Front Range of the Rocky Mountains at Boulder, Colorado, can be used to build a story of Earth history. The principles can be applied anywhere. The trip was the basis for a 20-minute widely-acclaimed teaching video produced by the Geological Society of America, titled "The Earth *Has* a History." A. R. (Pete) Palmer, the creator and narrator of the film, will be the trip leader. He is a paleontologist specializing in trilobites of the Cambrian Period, and a former professor of geology at the State University of New York, Stony Brook.

## 2. High-Altitude Ecology (12-person limit) \$10 p/p

Leave CCU at 9:00 AM for a 5-hour ecology tour. Box lunch included with meal packages 1, 2, and 3. Bottled water provided. Bring walking shoes and rain gear. Hiking moderate to strenuous, as group decides.

The 5-hour ecology tour will include areas like the Niwot Ridge highaltitude ecological study area. Hosted by Shannon Kuchel, biology instructor at CCU. <www.hao.ucar.edu> **3.** National Center for Atmospheric Research (12-person limit) \$10 p/p plus cost of lunch. Leave CCU at 9:45 AM for a 1-2 hour tour of the NCAR. Bottled water provided. Bring walking shoes, shorts, rain gear, and a way to carry water.

Tour will be led by Jeff Cole, a meterologist in the NCAR Applied Science Group. After the tour, we will leave from the NCAR parking lot for a 1.5-mile hike on the scenic Mesa Trail to the Chataqua Park in Boulder, where we will have lunch in the historic dining hall. The vans will meet us again at Chataqua for an early afternoon return. Plan on \$5–\$10 for lunch. Moderate hike. <www.ncar.ucar.edu>

**4.** National Renewable Energy Laboratory (40-person limit) \$10 p/p. Leave CCU at 12:30 PM after lunch and return by 4:00 PM.

The tour will begin at the NREL visitor's area. It is one of ten USDOE National laboratories and is the world's premiere research and development center for renewable energy technologies including: solar, wind, biomass and geothermal power, energy efficient buildings, and transportation systems using low- to non-polluting fuels, with emphasis on production of ethanol from biomass and hydrogen fuel cells. Trip is hosted by ASA President Ken Touryan. **IMPORTANT NOTE:** Non US citizens have to apply early and provide full name, country of citizenship, passport or other ID number, birth date/place. US citizens are required to show a picture ID during registration. <www.nrel.gov/>

#### 5. Red Rocks-Dinosaur Ridge (20-person limit) \$10 p/p.

Leave CCU after lunch at 12:30 PM, return 3:30 PM. Bottle water provided.

This 3-4 hour trip visits the famous Dinosaur Ridge fossil locality and views dinosaur track sites as well as fossil bones from the Jurassic Morrison formation. The sedimentary rocks in the area represent fluvial to deep ocean environments and range from the Pennsylvania to Tertiary age. Led by Thomas Bidgood, associate professor of physical sciences at CCU. <<wr/>
</www.dinoridge.org/maps.htm>

#### Saturday, July 26 Field Trip for Spouses

**6.** Betty Ford Alpine Gardens, Vail, (20-person limit) \$12, plus cost of lunch and shopping. Leave CCU at 9:00 AM and return at 5:00 PM.

Known "as the world's highest botanic garden, Betty Ford Alpine Gardens is recognized both nationally and internationally. Over 600,000 visitors have come to observe its beauty, experience its tranquility, and learn about high elevation plants and ecosystems." After the guided tour, we will spend the afternoon in Vail for lunch and shopping. Fran Donnithorne, wife of the CCU president, Larry Donnithorne will be your hostess. <www.bettyfordalphinegardens.org>

## Lodging at Colorado Christian University

Apartments have a kitchen, living room, dining room, balcony and three bedrooms, each with two twin beds. Two bedrooms share apartment bathroom; one bedroom has a private bathroom. Each apartment has a washer and dryer which are free. (You provide your own detergent.)

- Bedroom with apartment bath \$40 per night, single occupancy as available. For each night the room has double occupancy, the cost is \$20 per person. If you do not specify a roommate, we will attempt to match you with a roommate who will be staying the same nights.
- Bedroom with private bath \$50 per night, double occupancy only as available.

Linen package: \$13.50 per person –one time charge. Includes: two sheets, blanket, pillow and pillowcase, towel, wash cloth and soap.

**Meal packages:** 1. Thursday dinner through Monday lunch ...... \$100

- 2. Friday breakfast through Monday lunch ..... \$ 90
- 3. Friday lunch through Monday lunch ..... \$ 83
- 4. Friday dinner through Monday lunch ...... \$ 75

## CCU Emergency Telephone Number 303-963-3222

## Lodging at Area Motels/Hotels

Motel 6	—One mile from campus, 303-232-4608
Travel Lodge	—Two to three miles from campus, 303-238-7751.
	Mention "CCU room block" for a reduced rate.

## **Ground Transportation from Denver International Airport**

Shuttle Service: Golden West Commuter, 303-342-9300. Request the CCU Rate. You will be going to Zone 1. Coaches run at least hourly; sooner as needed. *Advanced reservations required*. www.commuter.com

## Car Rentals:

Avis:	1-800-831-2847	Enterprise:	1-800-325-8007
Budget:	1-800-527-0700	Hertz:	1-800-654-3131

# Annual Meeting information is on our web site WWW.asa3.org