Monday, July 21, 2003
EARLY WATER
1:30 p.m. Ramo Auditorium

Chairs: **R. P. Irwin**
V. R. Baker

1:30–2:00 p.m. Baker V. R. *
Geological History of Water on Mars **[#3139]**
There is abundant evidence that Mars is a water-rich planet. Water-related activity has persisted up to nearly the present day. This activity represents a long geological history involving the active cycling of water.

2:00–2:20 p.m. Schrag D. P. * Zuber M. T.
The Carbon Cycle, Climate Variability and the Fate of an Early Martian Ocean **[#3113]**
We seek to understand the planetary-scale control of climate through the study of climatic perturbations and their relationship to the carbon cycle on Earth, making basic geological and geochemical observations and then comparing these data with simple models of biogeochemical cycles.

2:20–2:40 p.m. Colaprete A. * Haberle R. M. Segura T. L. Toon O. B. Zahnle K.
Post Impact Mars Climate Simulations Using a GCM **[#3281]**
Reported here are the initial results of post impact climate simulations using the Ames Mars General Circulation Model (MGCM) reservoirs. In these simulations, an initial warm and wet atmosphere, like that which would immediately follow an impact, is allowed to evolve back to a steady state.

2:40–3:00 p.m. Grant J. A. * Fortezzo C.
Basin Hypsometry on the Earth, Mars, and the Moon **[#3050]**
Martian valley and basin morphometry may largely reflect the role of impacts in definition of basins and associated topography versus characteristics imparted by subsequent fluvial degradation.

3:00–3:20 p.m. Kereszturi A.
Paleodischarge Estimation from Morphometry for Ancient Channels **[#3039]**
We summarize a possible morphology based paleodischarge estimation method for meandering martian channels.

3:20–3:30 p.m. ***Break***

3:30–3:50 p.m. Parker T. J. * Grant J. A. Anderson F. S. Banerdt W. B.
From the South Pole to the Northern Plains: The Argyre Planitia Story **[#3274]**
Results from the MGS mission (and now the Mars Odyssey Mission) offered the opportunity to revisit the controversial origin and timing of putative sedimentary deposits within Argyre.

3:50–4:10 p.m. Irwin R. P. III* Maxwell T. A.
Multiple Generations of Martian Valley Networks: Reconciling Extensive Fluvial Erosion with Immature Drainage Systems **[#3243]**
Three generations of martian highland fluvial erosion are identified (ancient extensive erosion, visible degraded networks, and recent gullies) as Noachian networks were continually reorganized by cratering, airfall deposition, and basin infilling.