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Planetary Astronomy

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Strategy

Lunar-based astronomy offers major prospects for solar system research in the coming century. Because such developments typically require decades to implement, now is the time for efforts to begin. During a partial leave of absence from the University of Texas at Austin, H. Smith is at the Lunar and Planetary Institute organizing workshops on the various issues associated with astronomy from the Moon. Several articles on the subject are being prepared.

Progress and Accomplishments

A workshop and conference on astronomy from the Moon was organized and carried out last year (with M. Mumma at GSFC).

Projected Accomplishments

In addition to active advocacy of both ground-based and Lunar-based astronomy, a workshop on the value of asteroids as a resource for man is being organized.

Publications

"Astrophysics from the Moon - Composition and Structure of Planetary Atmospheres," L. Trafton, in *Astrophysics from the Moon* (M.J. Mumma and H.J. Smith, eds.), AIP Conference Proceedings **207**, 41-44.

"A Decade of Cost-reduction in Very Large Telescopes (The SST as Prototype of Special-Purpose Telescopes)", H.J. Smith, *Astrophys. and Space Sci.* **160**, 123-134.

"Executive Summary", of *Astrophysics from the Moon*, M.J. Mumma and H.J. Smith, AIP Conf. Proc. **207** (Pub. Am. Inst. of Physics, N.Y.), xxi-xxxi. Also, co-editor (with M.J. Mumma) of this book.

"A Plan for the Development of Lunar Astronomy", M.V. Sykes, F. Vilas, T.L. Page, H.J. Smith, J.O. Burns, M. Colavita, G. Snyder, S.A. Stern, and D.L. Talent, in *Astrophysics from the Moon* (M.J. Mumma and H.J. Smith, eds.), AIP Conference Proceedings **207**, 328-336.

"Very Low Frequency Radio Astronomy from the Moon", H.J. Smith, *Lecture Notes in Physics*, **362**, 29-33.