

## FOREWORD

The genesis of IAU Colloquium 182, 'Sources and scintillations: refraction and scattering in radio astronomy,' can be traced to the desire, on the one hand, of Beijing Astronomical Observatory radio astronomers to organize a conference which would highlight the need for high sensitivity – as a way of promoting their own project to build the world's largest telescope (FAST) – and to a suggestion from Ron Ekers on the other. During a discussion with the two SOC co-chairs (as they then were not) in January 1999 in Epping, Ron noted the success of a meeting on 'radio seeing' in Beijing in 1989, and wondered whether the time might not be ripe to organize another conference devoted to radio propagation. This set the ball rolling, and with enthusiastic input from SOC members, a successful application was made to the IAU. Later, the URSI also agreed to co-sponsor the meeting.

From April 17–21, 2000, over 80 astronomers from a dozen countries met in Guiyang, China, to discuss the latest exciting results and theoretical ideas on radio propagation through interstellar, intergalactic and interplanetary space. These proceedings include almost all (95%) of the oral presentations given at the conference. In addition to the 52 talks presented during 5 days of the Colloquium, Ron Ekers gave a fine summary at the end to tie things up. There were also poster sessions where some twenty papers were displayed.

Besides the scientific sessions, the LOC had organized a program for spouses and other accompanying persons. Everyone was invited to a superb banquet thrown by the Guizhou provincial government and hosted by His Excellency Qian Yun-lu, the governor, on 20 April. On the following afternoon, there was an excursion to one of the candidate sites for the FAST telescope in Pu-ding County, and a trip to the impressive Huang Guoshu Waterfall, followed by dinner with an entertaining show by members of local minority nationalities.

We are particularly grateful to the members of the LOC for all the effort they put into organizing the conference and related activities. In addition to the IAU and URSI, we wish to thank all of our sponsors for providing financial support without which IAU Colloquium 182 would not have been possible. They include the Chinese Ministry of Science and Technology, Guizhou Province, the Chinese Academy of Sciences, the National Science Foundation of China, and the National Astronomical Observatory of the CAS. And from us the editors, a final small word of thanks to our authors and referees.

IAU Colloquium 182 was a forum for exchanging the latest ideas on refraction and scattering in radio astronomy, a modern area of study in a young science.



Astronomy is a venerable science in China, with a tradition extending back for over two millennia. Scholars and intellectuals have long enjoyed a special position in Chinese society: the civil service examination in dynasties ranging from the Han to the Qing included a section on poetic composition. One of the Tang Dynasty (AD 618-907) poets – one of China’s greatest poets – Li Bai (李白; also, Li Bo or Po) was noted for the spontaneous genius of his versifying, as well as his fondness for liquid spirits. The title of one poem – ‘Inquiring of the Moon, Winecup in Hand’ (把酒问月) serves both to illustrate this, and suggests a certain astronomical inclination.

Rumor has it that Li Bai, inebriated one night, drowned while trying to capture the moon reflected from the surface of the river. While the story is apocryphal, it would be nice to think that perhaps Li, like us, was attempting to fathom the complexity of darting, dancing, distorted images. We are still trying. . .

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