

1952, and makes no secret of his belief that eighteen years has been too long. By all accounts his job has been arduous, and until recently Dr Chandrasekhar personally dealt with much of the technicalities of producing the 400-page monthly journal and the thinner letters section that appears separately, as well as the scientific editing. Like editors everywhere, his selection of papers for the journal is sometimes criticized. The competition for space in the *Astrophysical Journal* is strong, and last week Dr Chandrasekhar was moved to say that he has come to hate astronomers just as much as astronomers hate him. Between 25 and 30 per cent of the manuscripts submitted for the main journal have to be rejected, and the rejection rate for the more prestigious letters section which contains short items of urgent interest is 50 per cent.

Dr Chandrasekhar was sixty this year, and by resigning from the *Astrophysical Journal* now he hopes to find more time for his scientific work before he retires from the University of Chicago. His resignation comes into effect on April 1 next year. From then on new manuscripts submitted for the main part of the journal will go to Dr Helmut A. Abt, of the Kitt Peak Observatory who will be acting editor, and for the letters section to Dr D. E. Osterbrock, of the University of Wisconsin. But with the six or seven month publication delay in the main journal, Dr Chandrasekhar expects to continue his involvement with the journal until the November issue next year.

The changes that Dr Chandrasekhar's resignation will bring about arise because the University of Chicago Press which publishes the *Astrophysical Journal* wants to divest itself of its interest by the end of next year now that there will be no University of Chicago astronomers involved in running the scientific side of the journal. It is thought that the press is unhappy about continuing to publish the journal because their control over it would be lessened while they would continue to be financially responsible. It is expected that the American Astronomical Society will take over the journal, and a committee to study the changeover will probably be formed at the December council meeting. The committee will report back in the spring and the deal will have to be approved by the membership next summer.

In the past the profit for the University of Chicago Press has been the interest on a trust fund maintained at 25 per cent of the operating cost of the journal, held in reserve as a cushion against an operating deficit.

At present the role of the American Astronomical Society in the running of the *Astrophysical Journal* is as a consultant, and the council of the society appoints the five member editorial board. What usually happens is that Dr Chandrasekhar submits a list of the people he would like to fill a vacancy, and the council has made the final selection. It is not yet known who will look after the mechanics of publishing the journal, but the likeliest possibility seems to be the American Institute of Physics which already publishes the *Astronomical Journal* for the society. It would then seem appropriate for the *Astrophysical Journal* to merge with the *Astronomical Journal*, which has come to have very much the look of a poor relation, and has remained chiefly a medium for papers on celestial mechanics whereas the *Astrophysical Journal* reflects all branches of astronomy. According to a spokesman for the society, however, it is more likely

that the two journals will become three by the division of the *Astrophysical Journal*. Although the letters section will continue monthly as before, the main part of the journal will appear twice a month from January. Instead of the present 400 pages per month there will be two issues of 250 pages. To begin with the mix of papers will be the same in both issues, but eventually there could be a subdivision by subject matter, involving the two issues of *Astrophysical Journal* and the *Astronomical Journal*. It appears therefore that there are the beginnings of a rationalization of the astronomy journals on the west of the Atlantic to match the merging of the European journals into *Astronomy and Astrophysics*. Although it is not always good that the number of publications open to astronomers should be reduced, the journal that stood aloof from the European merger, the *British Monthly Notices of the Royal Astronomical Society*, has recently seemed to be very much out on a limb.

PLANETS

Roll Up for the Grand Tour

NASA has begun to solicit help from the scientific community for the definition phase for the so-called grand tour missions to the outer planets. Although there is no funding yet for the two launches which are being considered—the first in 1977 to Jupiter, Saturn and Pluto, and the second in 1979 to Jupiter, Uranus and Neptune—work will have to start soon on the detailed design of the spacecraft if they are to catch the fortuitous line-up of the outer planets which makes the mission possible. An invitation for participation dated October 15 has been issued to scientists in the United States and elsewhere. The definition phase of a mission involves the selection of the basic properties of the spacecraft, its power, data handling capabilities and so on, and the best orbit to provide the most valuable return of scientific information. In the words of the NASA invitation "It will be the responsibility of the scientists selected to develop mission plans, define typical payloads, and participate in trade-off studies to maximize the value of each mission within its particular constraints".

NASA plans to hold a briefing for interested scientists in Washington on November 17, after which proposals for participation giving details of the proposed investigation and instrumentation are to be submitted by January 18. NASA hopes to have finished the selection process by March 15, and will form an imaging science team, and a radio science and celestial mechanics team. Although it is hard to recall any involvement from abroad in previous NASA definition studies, NASA is stressing that the competition is open to foreign scientists, who should forward their proposals through the National Space Agency. Letters of intent from US scientists have to be received by NASA by November 9 and from foreign scientists by November 16, and these letters do not have to be endorsed by the National Space Agency.