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The 2001 Astronomy Job Market

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Over the 12 month period spanning July 2000 to June 2001, a survey of the American Astronomical Society monthly Job Registers showed that ∼300 Postdoctoral Fellowships (PDFs) in astronomy were available. To put that into perspective, there are ∼250 new astronomy/astrophysics PhDs awarded each year (∼1/2 of which originate from US degree-granting institutes). Historically, there are ∼70 new permanent positions on the market per year. One bottom line is that ∼3/4 of PhD graduates will land a PDF position (i.e. after discounting those who voluntarily leave the field, virtually all graduates who want a PDF will find one). The overproduction rate of PhDs-to-permanent positions remains at ∼3.

The number of permanent positions advertised in this 12 month period was up somewhat: 83.5 "permanent" positions were advertised in the AAS Job Register, 69.5 of which were based in the US, and 47.5 of the 83.5 faculty positions were "targeted" (in the sense that a specific area of astrophysics was required). The breakdown makes for interesting reading and should be brought to the attention of prospective PhD students: 48% of the positions were targeting 'theory', 32% were targeting 'observation', and 20% were targeting 'instrumentation'. In terms of research areas, 56% were looking for cosmologists of one sort or another, 25% were looking for planetary scientists, 11% were looking for high energy astrophysicists, and 8% were looking for stellar astronomers.

Some peculiarities to the Australian community were highlighted, including the following: (1) Australian institutes produce astronomy PhDs at a rate in excess of that encountered in other countries (only 10% of Australian graduates end up with permanent positions in astronomy in Australia); (2) to their detriment, Australian students were reluctant to change institutes

between their BSc and PhD; (3) a perception exists (in some corners) overseas that Australian students undertake too much observing during their PhD ("excellent observers, but not all that well-trained in astrophysics").

In terms of a so-called "recipe for success" for prospective astronomy PhD students, the following was suggested: (1) investigate the past history of both the school and supervisor who interests you (e.g. how have their past students fared? What is their grant history like? What are the opportunities for external & international collaborative links?); (2) know what's hot (both in the near- and long-term - e.g. computational and/or theory, cosmology, instrumentation, planetary, astrobiology); (3) get experience writing grants; (4) be sure to network; (5) avoid excessive observing; (6) be wary of undertaking PhDs within very large teams; (7) for Australian students, move institutes for your PhD and PDF, and be prepared to emigrate; (8) be aware of the competition (most folks have $\sim$10 papers by the end of their first PDF position).