For Your Information

Departments Coordinate Job Offer Deadlines

A group of mathematical sciences departments has adopted an agreement to coordinate deadlines for acceptance of postdoctoral job offers. The purpose is to ensure that applicants do not have to make decisions about job offers before the results of the National Science Foundation (NSF) postdoctoral fellowship competition are announced. The agreement applies only to offers of postdoctoral positions and not tenure-track positions, and only to applicants who are less than two years past the Ph.D.

The departments have agreed not to require these applicants to decide about a job offer before Monday, February 11, 2002. The NSF has agreed to notify postdoctoral fellowship recipients no later than Thursday, January 31, 2002. The list of participating departments, together with additional information, may be found on the Web at `http://www.ams.org/employment/postdoc-offers.html`.

—Allyn Jackson

DMS Employment Opportunities

Several of the technical staff of the Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF) serve one- to two-year visiting scientist or Intergovernmental Personnel Act appointments as program directors while on leave from universities, colleges, industry, or national laboratories. Since the timing of these positions is staggered, the division continually seeks talented applicants. In 2002 the division will be seeking to make appointments in all areas. Permanent program director appointments will also be considered.

The positions involve responsibility for the planning, coordination, and management of support programs for research (including multidisciplinary projects), infrastructure, and human resource development for the mathematical sciences. Normally, this support is provided through merit-reviewed grants and contracts that are awarded to academic institutions and nonprofit, nonacademic research institutions.

Applicants should have a Ph.D. or equivalent training in a field of the mathematical sciences, a broad knowledge of one of the relevant disciplinary areas of the DMS, some administrative experience, a knowledge of the general scientific community, skill in written communication and preparation of technical reports, an ability to communicate orally, and several years of successful independent research normally expected of the academic rank of associate professor or higher. Skills in multidisciplinary research are highly desirable. Qualified women, ethnic/racial minorities, and/or persons with disabilities are strongly urged to apply. No person shall be discriminated against on the basis of race, color, religion, sex, national origin, age, or disability in hiring by the NSF.

Applicants should send a letter of interest and a vita to Bernard R. McDonald, Executive Officer, Division of Mathematical Sciences, National Science Foundation, 4201 Wilson Boulevard, Suite 1025, Arlington, Virginia 22230, telephone 703-292-4851, fax 703-292-9032, e-mail: `bmcdonal@nsf.gov`.

—NSF announcement

Mathematics Awareness Month 2002

The Joint Policy Board for Mathematics announces that this year's Mathematics Awareness Month focuses on the contributions of mathematics to understanding of our own genome.

With the completion near of the sequencing of the human genome, the catalogue of all our genes and whatever else is in our chromosomes, scientists and indeed all of mankind have the sense that we are coming into possession of the key to enormous insights into many fundamental medical and biological problems. Unfortunately, even as we are inundated with waves of new data from these projects, the problem of interpreting and using this new store of data has arisen as a fundamental challenge to the way biomedical science will be carried out in the future. Mathematics has contributed centrally to the taming and understanding of this data to date and will play an ever larger role in its analysis in the future.

As data collection for the genome sequencing problems became automated, large, fast, efficient computer algorithms were utilized to reconstruct the genome from the fragments which experimenters could sequence and to help locate where genes were in this avalanche of sequence data. The static map of the genome is almost in hand, and we move on to the study of the dynamic system of proteins and RNAs produced from the genome and how that profoundly complex system is regulated. Both dynamical system methods from machine learning and statistics are being used to figure out how the control system of the genome has been "engineered". Microarray technologies allow thousands of potential gene products to be measured simultaneously, affording a snapshot of the genome's dynamics. Challenging issues in statistics are being dealt with in order to design experiments to

optimize the information extracted from such experiments. These techniques are already being used to discern molecular "signatures" of tumor types, to be used in the prescription of cancer therapy regimens by clinicians.

Computational models of large biomolecules are now central to drug discovery in the pharmaceutical industry. The list goes on.

The Mathematics Awareness Month poster emphasizes some of these aspects of genome science today: the dynamics of DNA being initiated by transcription factor proteins, and the microarray technology and its accompanying host of statistical analyses.

This year's Mathematics Awareness Month program will provide resources to scientists, educators, and policy makers for exploring the role of the mathematical sciences in understanding the human genome and its role in medicine and biology.

These resources can be found at `http://www.mathforum.org/mam/02/`.

—Dan Burns
University of Michigan, Ann Arbor

Correction

In my article "The Continuum Hypothesis, Part II" [*Notices*, August 2001 issue, pages 681-690], the end of the second paragraph following the theorem in the second column on page 684 reads: "For example, the initial segment of length ω_1 is given by the Borel sets, and the corresponding ordinal rank of a Borel set is closely related to its classical Borel rank."

This is not correct. It should read: "For example, the sets of countable ordinal rank are each Borel, and the ordinal rank of an arbitrary Borel set can be computed from its classical Borel rank."

—W. Hugh Woodin

Addition to "Backlog"

What follows are two additions to the the "Journal (Print)" section of the "Backlog of Mathematics Research Journals", which appeared in the December 2000 issue of the *Notices*, pages 1355-1358. *Discrete and Continuous Dynamical Systems*. Number of issues per year—4; approximate number of pages per year—1,200; 2000 median time (in months): submission to final acceptance—3; acceptance to final publication—4; editor's estimate of waiting time (in months) for paper submitted currently to be published—8. *Discrete and Continuous Dynamical Systems, Series B*. Number of issues per year—4; approximate number of pages per year—800; 2000 median time (in months): submission to final acceptance—2; acceptance to final publication—3; editor's estimate of waiting time (in months) for paper submitted currently to be published—5. Both journals are issued and published by the American Institute of Mathematical Sciences.

—Michael Saitas, AMS