| Drogram                                 | FY 1971<br>(millions of | FY 1972<br>(millions of | Drogram                                 | FY 1971<br>(millions of<br>dollars) | FY 1972<br>(millions of<br>dollars) |
|---|-------------------------|-------------------------|---|-------------------------------------|-------------------------------------|
| Program                                 | dollars)                | dollars)                | Program                                 |                                     | 114.4                               |
| Atomic, molecular and plasma physics    | 2.7                     | 3.6                     | High energy<br>Medium energy            | \$118.6<br>13.0                     | 12.8                                |
| Elementary particle physics             | 10.8                    | 14.7                    | Low energy<br>Mathematics and computers | 27.7<br>5.4                         | 25.3<br>4.8                         |
| National Magnet Laboratory              | 0                       | 1.8                     | Chemistry Metallurgy and materials      | 51.6<br>26.8                        | 49.0<br>25.2                        |
| Nuclear physics                         | 9.0                     | 11.3                    | (solid state physics)                   |                                     |                                     |
| Solid state and low-temperature physics | 4.7                     | 6.0                     | Controlled fusion                       | 28.4                                | 28.0                                |
| Theoretical physics                     | 3.8                     | 5.6                     |   |                                     |                                     |
| Total                                   | 31.0                    | 43.0                    | Total                                   | 271.4                               | 259.5                               |

National Radio Astronomy Observatory is budgeted for \$7 million, up from \$6.4 million last year. For the National Center for Atmospheric Research the request is \$19.2 million, up from \$15.5 million last year.

NSF education programs are being redirected: The Science Development Program is being discontinued altogether, dropping from \$20 million in FY 1971 to zero in FY 1972. Since its establishment in 1964 the program gave over \$200 million to support 100 colleges and universities in increasing the quality of their graduate science and engineering programs. The Institutional Grants for Science are being reduced from \$14.5 million to \$12.0 million.

Direct student support programs are being reduced or phased out, NSF says, "in recognition of the existing balance of supply and demand for graduates with advanced science and engineering degrees and projected surpluses in some areas." Graduate fellowship and traineeships, for example, are dropping from \$28.3 million in FY 1971 to \$20.0 million in FY 1972. Postdoctoral fellowships have been eliminated.

The AEC Division of Research has been hit hard, its operating budget declining from \$271.4 million to \$259.5 million (see table 3). Each of the programs has been trimmed, roughly in proportion to its size, although the controlled-fusion effort was given the benefit of a little priority, dropping only \$400 000.

The medium and low-energy physics programs are being affected because of the high priority given to operating funds for the Los Alamos Meson Physics Facility; it received its final construction budget of \$6.7 million, completing its \$56-million finding. Roughly 20 nuclear-structure contracts are being terminated. The largest of these programs are at Texas A & M (which has a large cyclotron), University of California at Davis (which also has a large cyclotron) and Purdue University.

Construction funds for the National Accelerator Laboratory are pegged at \$48 million, bringing the total obligated almost to \$200 million; total construction cost is to be \$250 million. Because the operating budget at Batavia was boosted from \$9.15 million to \$11.9 million, other high-energy programs have been cut.

The Defense Department budget for physics is unavailable, although, in principle the roughly \$15 million from the IDL's and the Magnet Laboratory would be available for basic research. Total obligations for DOD reserach are \$1625 million, up from \$1472 million. Emphasis will continue to be placed on fundamental and applied research in electronics, oceanography, materials science and lasers.

David says that despite easing of the Mansfield amendment's restrictions on research support, "the overall DOD thrust. . .is quite compatible with the notion of relevance."

NASA's budget for research is planned to increase from \$1474 million to \$1582 million, while its development budget is down. Work will begin on the High Energy Astronomy Observatory, which is the first of a series of satellites to study x-ray and gamma-ray sources and cosmic rays. Research funding is planned for design of experiments and instrumentation for the "Grand Tour" unmanned missions to the outer planets in the latter part of the decade and for the 1975 Viking unmanned orbiter lander exploration of Mars. In addition to completing three more Apollo missions, there will be an increase in the earth-orbital manned-flight program for Skylab, an experimental manned space station.

## the physics community

## Twelve SPS chapters receive Bendix support

The Society of Physics Students has announced that 12 SPS chapters have received research support from the 1971 Bendix Awards program.

The chapters are at Andrews University, Mich., Bowling Green State University, Mich., Creighton University, Neb., East Stroudsburg State College, Penna., Gannon College, Penna., Iowa State University, Iowa, University of Santa Clara, Calif., University of Scranton, Penna., Southwestern State College, Okla., and Thomas More College, Ky.

## Unpaid page charges will delay publication

If the publication charge is not honored for papers accepted by certain AIP journals, publication of a paper may be considerably delayed. Noting the large backlog of papers for which page charges have not been paid, the executive committee of the AIP governing board has set a limit on the number of pages that can be published in 1971 without payment of these charges.

Five journals are affected. Papers accepted and tentatively scheduled for publication in the Journal of Chemical Physics and Physics of Fluids for issues later than April, and in the Journal of Mathematical Physics for issues later than June, will probably not be published in 1971 unless the charges are honored. For the Review of Scientific Instruments and the Journal of Applied Physics the delay will be at least two months if publication charges have not been paid; there will be no delay when the author's institution honors the publication-charge obligation.

Publication policy may be further revised after the executive committee reviews the AIP budget in June.