

AFIPS BORN

At 12:05 am on Wednesday, May 10, 1961, the American Federation of Information Processing Societies came into being. This society of societies was created by delegates of the National Joint Computer Committee, meeting at the Ambassador Hotel during the Western Joint Computer Conference. As a national voice for the computing profession, AFIPS will coordinate the advancement and diffusion of knowledge of the information processing sciences at all levels and to all media.

Member societies of NJCC, which are also the founding societies of AFIPS, include the American Institute of Electrical Engineers, the Association for Computing Machinery, and the Institute of Radio Engineers.

Dr. Willis H. Ware, of the Computer Sciences Department of the RAND Corporation, Santa Monica, California, was elected first chairman of AFIPS' Governing Board after the AIEE, ACM and IRE had each selected four members for the board. The board will expand its membership as other qualified societies apply for membership and are accepted.

Immediate AFIPS objectives include making an orderly transition of business and authority from NJCC and formulation of plans for future joint computer conferences.

AFIPS will now be the United States representative to IFIPS—the International Federation of Information Processing Societies. (Organizational set-up of IFIPS is given in the May issue of *Communications*.)

16TH ACM NATIONAL CONFERENCE

September 5-8

Statler-Hilton Hotel

Los Angeles

Ben Handy, chairman of the local arrangements committee, reports that there will be 18 sessions of contributed papers and 11 of invited papers at the National Conference in September. One hundred forty-five contributed papers have been received. Informal "halls of discussion", pre-scheduled and impromptu, will be included in the program. More than fifty booths have been sold, with exhibitors covering computer and accessory manufacturers, consulting services and large user organizations.

The preliminary program will be mailed by June 15, and the final program and conference information by August 1st. Bound preprints containing four-page summaries of all papers will be available at registration.

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Algorithms

ALGORITHM 60

ROMBERG INTEGRATION

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```
real procedure rombergintegr (fct, lgr, rgr, ord) ;
  value lgr, rgr, ord ;
  real lgr, rgr; integer ord ; real procedure fct ;
  comment rombergintegr is the value of the integral of the
  function fct between the limits lgr and rgr, calculated by the
  algorithm of Romberg with an error term of the order
  2×ord+2, ord≥0 Computation time will roughly be doubled
  when ord is increased by 1;
begin
  real array t[1 : ord+1];
  real l, u, m ;
  integer f, h, j, n ;
  l := rgr-lgr ;
  t[1] := (fct(lgr)+fct(rgr))/2 ;
  n := 1 ;
  for h := 1 step 1 until ord do
    begin u := 0 ;
      m := l/(2×n) ;
      for j := 1 step 2 until 2×n-1 do
        u := u+fct(lgr+j×m) ;
      t[h+1] := (u/n+t[h])/2 ;
      f := 1 ;
      for j := h step - 1 until 1 do
        begin f := 4×f ;
          t[j] := t[j+1]+(t[j+1]-t[j])/(f-1)
        end ;
      n := 2×n
    end ;
  rombergintegr := t[1]×l
end
```

Contributions to this department must be in the form stated in the Algorithms Department policy statement (*Communications*, February, 1960) except that ALGOL 60 notation should be used (see *Communications*, May, 1960). Contributions should be sent in duplicate to J. H. Wegstein, Computation Laboratory, National Bureau of Standards, Washington 25, D. C. Algorithms should be in the Publication form of ALGOL 60 and written in a style patterned after the most recent algorithms appearing in this department.

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