

## TEACHING OF ASTRONOMY ON A NATION-WIDE BASIS

Lucette Bottinelli, Michèle Gerbaldi and Lucienne Gouguenheim, Université de Paris-Sud, F-91405, Orsay, Cedex, France

E-mail: bottin@obspm.fr

The Centre National d'Enseignement à Distance has produced in 1993, for the first time, in collaboration with the Université de Paris Sud, a yearly correspondence course in Astronomy. This course is offered for academic credit: "Diplôme d'Université". Nearly 800 students have enrolled in this course and 400 went for the examination, which is not compulsory. This course consists of a printed text (about 550 pages), a videocassette of 55 minutes, a set of 60 slides, a set of 41 photos, a leaflet of exercises (with answers) including some home experiments. Three written problems are proposed: they are individually corrected. Moreover a direct link with a tutor is available through the French e-mail system, the "Minitel". It is also proposed to participate twice in a full-day meeting in a French observatory. Students study exclusively in their own homes, on their own time, and progress at their own rates. They can test their progress by answering the questions spread all along the written course and by using the set of multiple-choice questions available through the Minitel.

**Student Statistics:** (1) The students: 26% women, 39% less than 35 years, 24% from Paris and suburbs, 71% from the French provinces, 5% from foreign countries; (2) Occupations: 25% school teachers, 5% amateurs, 13% engineers, 12% technicians, 6% medical professions; (3) e-mail (Minitel): 233 questions about the course itself, 37 about exercises, 109 about homework, 117 miscellaneous; (4) written problems: 23% returned all 3, 30% returned 2, 11% returned 1, 26% returned none; (5) Two full-day meetings in an observatory: Bordeaux: 29, Grenoble: 25, La Réunion: 4, Marseille: 38, Nice: 34, Paris: 126, Meudon: 180, Strasbourg: 33, Toulouse: 69; (6) Examination: 63% present and 85% of them (53% of the total) successful candidates.