the simple guidelines will be that programmes of general interest written by others following these guidelines can be easily integrated. This opens up the possibility of sharing to a wide number of people. Perhaps the message from this workshop on following guidelines is: "Try it, you'll like." A corollary is: "So will your colleagues.".

Finally those present at this workshop felt that the success of these few days warranted continued meetings on this topic at roughly 6-month intervals. The group decided to baptize themselves as the "Working Group on Co-ordination of Astronomical Software", but did not consider drawing up any formal "terms of reference" to guide the further deliberations. Thus the future tasks of the Working Group are still to be defined. Suggestions are welcome.

P. Crane

Tentative Time-table of Council Sessions and Committee Meetings

The following dates and locations have been reserved for meetings of the ESO Council and Committees:

November 4	Scientific/Technical Committee, Garching
November 5	Finance Committee, Garching
November 6	Committee of Council, Garching
November 26-27	Council, Garching
December 2-4	Observing Programmes Committee, Garching

Cataclysmic Binaries – From the Point of View of Stellar Evolution

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Cataclysmic Binaries

Cataclysmic variables (CV's) is the common name of a subgroup of eruptive variables consisting of the classical novae, the dwarf novae, the recurrent novae and of the nova-like objects. Since Kraft's pioneering investigation about twenty years ago (Kraft, R. P.: 1973, *Adv. Astron. Astrophys.* **2**, 43) we know that probably all of the CV's are close binaries. However among the roughly 500 CV's known at present, only for about 50 objects has the binary nature been established by observations. Hereafter these objects will be referred to as cataclysmic binaries (CB's). From the histogram of their orbital periods, shown in Fig. 1, it is seen that CB's have extremely short orbital periods, typically only a few hours. Moreover the histogram shows a remarkable gap of orbital periods in the range between about 2 and 3 hours. This gap has been found to be statistically highly significant. Apparently CB's are divided into two subgroups, i. e. into the ultrashort-period CB's (hereafter USPCB's) with orbital periods $P \lesssim 2^h$ and into the longer-period CB's (hereafter LPCB's) with orbital periods $P \gtrsim 3^h$.

From the wealth of observational data gathered during the past twenty years (for details see the excellent review paper by B. Warner: 1976, IAU Symp. No. 73, p. 85) a standard model of CB's has been derived. Accordingly a CB consists of a white dwarf primary in orbit with a low-mass main-sequence secondary which fills its critical Roche volume (Fig. 2). Matter streaming from the secondary through the inner Lagrangian point L_1 falls into an accretion disk around the white dwarf. At the point where the matter coming from L_1 hits the disk a shock front is formed which is usually referred to as the hot spot (Fig. 2). The typical masses involved are roughly 1 $M_\odot$ for the white dwarf whereas the secondary's mass is approximately 0.1 $M_\odot$ times the orbital period in hours. The relation between the secondary's mass and the orbital period is a direct consequence of assuming the secondary to be a main-sequence star.

Are the Secondaries Evolved?

Knowing a CB's orbital period, the mass and the radius of the secondary can easily be computed if it is assumed to be a main-sequence star, i. e. that it is essentially unevolved. On the other hand deriving the secondary's mass and radius from observations without making this

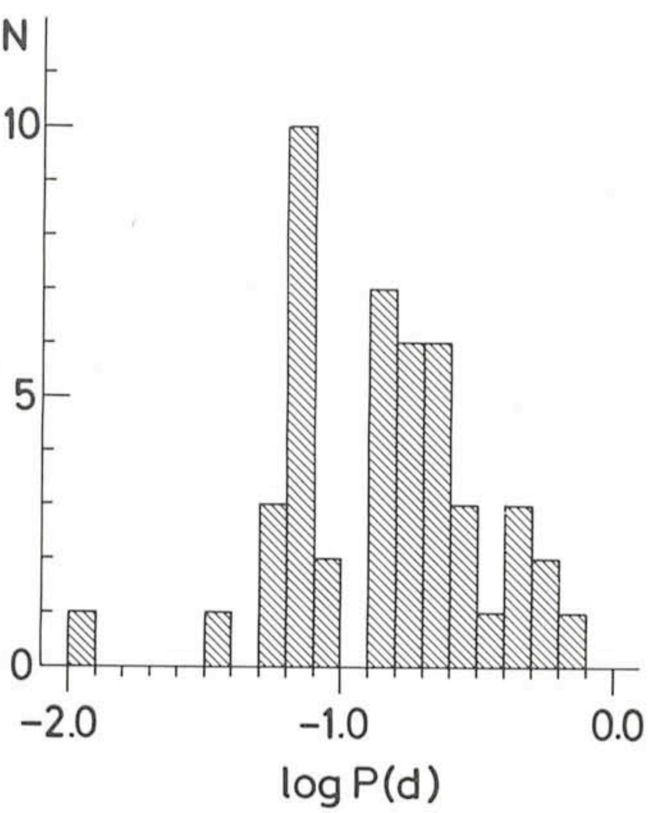

Fig. 1: *Histogram of the orbital periods of known cataclysmic binaries. Note the gap in orbital periods in the range $-1.0 \lesssim \log P$ (d) $\lesssim -0.9$, i. e. $2^h \lesssim P \lesssim 3^h$.*