is that it should be *one* of the systems used in all published results. In addition, however, the procedure by which quantities are to be converted into astrophysical units, e.g. parsecs, km/sec, solar masses, etc., should be stated explicitly. (Errors can easily be made in efforts to track down the definition of dimensionless variables, or quantities expressed in arbitrary units, and furthermore the repeated labour involved is a waste of time.) This is not to say that it is best to use astrophysical units in the first place; to do so involves choosing particular values for M and E, whereas many stellar dynamical calculations are formally valid for any choice of these values. Thus the unit of density in the system (1) could be quoted as

$$10^3 \left(\frac{M}{10^6 M_\odot}\right) \left(\frac{R}{10pc}\right)^{-3} M_\odot pc^{-3},$$

where M and R are, respectively, the mass and virial radius of the astrophysical system to which the calculations are to be applied.

From the observer's point of view, the applicability of theoretical results is enormously enhanced if they are presented in a manner analogous to the presentation of obtainable data. Since the latter is usually constrained by our perspective on the universe, it is incumbent on theorists to make full use of the greater flexibility available to them in the presentation of their results. Oft-cited examples are the projection of three-dimensional density profiles onto two dimensions, and the conversion of anisotropic velocity distributions into tangential- and radial-velocity distributions.

2. Relaxation times

For theoretical purposes one needs both local and global measures of the relaxation time scale. The choices made by Spitzer and Hart (1971) are adopted quite commonly, i.e. the local relaxation time

$$t_{rf} = \frac{v_{mf}^3}{35.4 G^2 m \rho_f \log_{10}(0.4N)} \tag{2}$$

and the half-mass relaxation time

$$t_{rh} = \frac{0.0600 M^{\frac{1}{2}} R_h^{\frac{3}{2}}}{G^{\frac{1}{2}} m \log_{10}(0.4N)}, \tag{3}$$

where we have given the form of t_{rf} appropriate when all stars have the same mass m, v_{mf}^2 is the mean square (three-dimensional) speed of the stars, ρ_f is their mass density, and R_h is the radius containing half the total mass.

Both choices have arbitrary aspects, and even contentious ones (the argument of the 'Coulomb logarithm'). For theoretical purposes it would be preferable, perhaps, to choose a relaxation time which simplifies the Fokker-Planck equation as much as possible. This was the basis of the old reference time introduced by Spitzer & Hārm (1958), but since Spitzer evidently subsequently preferred eq.(2), we are unable to suggest any better alternative. The important point is that it is essential to state precisely what definition of relaxation time is being adopted. It is not even enough to say 'Spitzer & Hart (1971), eq.(5)', since this equation gives two definitions for t_{rh}, which agree only if a further approximation is made. It is also necessary to make clear whether natural or common logarithms are intended.

These remarks are trivial, but they are made simply because confusion has arisen in the literature in cases where such points have not been stated explicitly. It is worth pointing out that a similar confusion exists among observers as well, indeed at a more fundamental level. One finds in the observational literature a variety of applications of different formulae for the relaxation