Change of Directors

The official change of Directors took place on July first of 1993. Guy Monnet plans to leave Hawaii in late August, insuring a smooth transition and some time for P. Couturier, the new director, to get up to speed about CFHT business.

Guy's concern has always been to increase the efficiency of the operation, trying to do the very best with what we have. This reflected back on many aspects of the corporation activities from the so-called "Monday Meetings," which have been shortened substantially, to the daily operation of the telescope and cost reduction of administrative meetings.

Guy's weekly tasks included regular visits to the engineers and astronomers for numerous discussions on the status of projects, and instruments. His direction was everything but done from an ivory tower, isolated from the staff. He had, at all times, a precise view of the status of the corporation undertakings, which provided him a global vision and therefore most efficient direction of the endeavors of the CFHT. In return, the staff had a direct feedback of the director's intentions on these issues. This style of direction, with open dialogue has been definitely greatly appreciated by CFHT staff.

It was always an amazing experience to discuss with Guy about the future of CFHT despite the corporation struggle with the daily operation of the telescope and sometimes heavy task load or exceptional repairs or system failures. He could get above these temporary burdens and elaborate on the vision he had of the CFHT in year 2005!

Guy was certainly appreciated very much by the staff for his availability to staff requests, his cheerfulness, sense of humor and vast knowledge.

The 'director' has left; long live the 'director' !

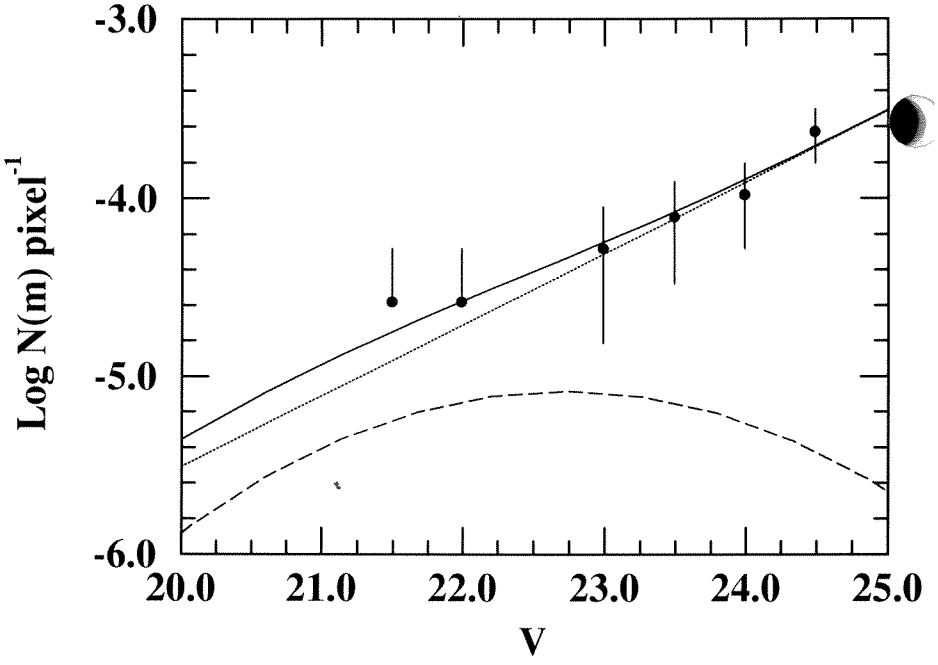

Figure 2: Number density of discrete objects for a region of the N-E side of the bulge of NGC 4565 as a function of magnitude. Also shown are the model LF (globulars + galaxies) (Solid line), the globular cluster component (Long dashed line), and the background galaxies component (Dotted line).

Surface Brightness Fluctuation Distances to NGC 4494 and NGC 4565 & the Virgocentric Infall

1. Introduction

The idea behind the surface brightness (SBF) method of Tonry and Schneider (1988) is elegant yet simple: pixel-to-pixel variations are present in images of galaxies, and these variations are proportional to $\bar{f}\sqrt{N_*}$, where N_* is the mean number of stars present in each pixel, and $\bar{f}$, is the average flux per star. Since $N_* \alpha d^2$ (where d is distance), and $\bar{f} \alpha d^{-2}$, the rms fluctuations will scale as d^{-1}. The flux $\bar{f}$ can be shown to be the flux that would be received from a star of luminosity $\bar{L}$, where:

$$\bar{L} = \frac{\sum n_i L_i^2}{\sum n_i L_i}$$

$\bar{L}$ is just the luminosity-weighted average luminosity of a stellar population. The main assumption of the SBF method is that $\bar{L}$ remains the same from galaxy to galaxy, or at the very least, that the dependence of $\bar{L}$ on stellar population properties (e.g. color) has been calibrated.

This work is part of a project to compare old stellar population distance indicators (such as globular cluster luminosity functions [GCLFs], planetary nebula luminosity functions, and surface brightness fluctuations) in different environments. The project requires a group of galaxies with the following attributes:

- The group should contain Sa-Sb galaxies that are comparable in mass to M31 (so that a substantial globular cluster population is present).
- The inclination for these spirals should be close to edge-on ($i > 80°$, for GCLF completeness and dust-free regions for SBF analysis).
- The group should be at high galactic latitude.
- Distances less than that of the Virgo Cluster are preferred (so that the 'turnover' in the GCLF can be reached).
- The same group should contain one or more luminous ellipticals to permit a comparison of distance indicators in spirals and ellipticals.

We chose the Coma I group of galaxies (Gregory and Thompson 1977) located 17° north of the center of the Virgo Cluster. Thirty galaxies are believed to be definite group members, and spirals are the dominant constituents. The group mean redshift is 980 km/s. We analyzed surface brightness fluctuations in two Coma I 'members': NGC 4565 (an edge-on Sb galaxy) and NGC 4494 (E1).