

SECULAR EVOLUTION OF THE SOMBRERO GALAXY.

ERIC EMSELLEM

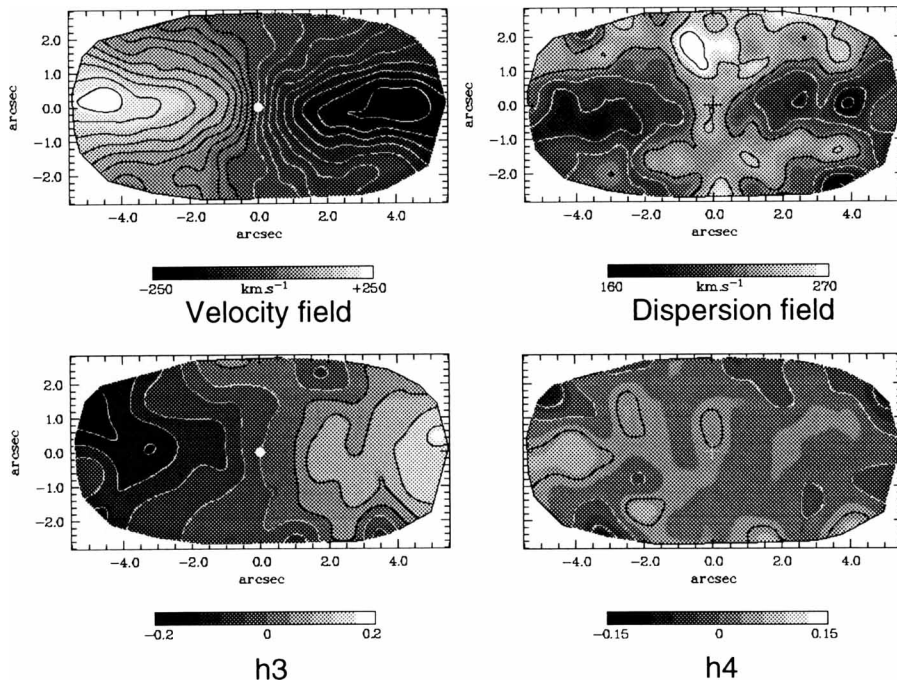
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Figure 1. TIGER maps of the stellar velocities, velocity dispersions and the Gauss-Hermite coefficients (h_3 , h_4) of the central region of M 104.

We present several pieces of evidence that there was an interaction between a bar, which is now dissolved (presumably by a small merger event - Emsellem 1995, A&A in press), and the interstellar medium (gas/dust) in the Sombrero Galaxy (M 104). This study has been achieved by combining new photometric and 2D spectroscopic data (HRCAM, TIGER - Fig. 1) with realistic models (a 3D spatial model of the dust distribution taking into account light scattering, and self consistent two-integral models). Such secular evolution of galaxies driven by bars may be a very common process (Friedli & Benz 1993, A&A 268, 65).