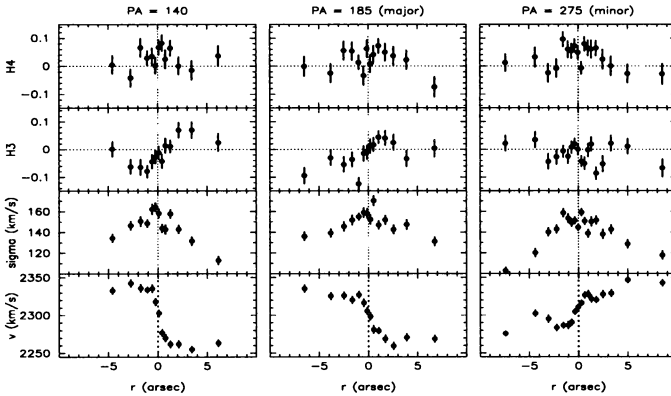


PECULIAR KINEMATICS IN THE CORE OF NGC 474

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We present absorption line profile analysis of NGC 474, an elliptical with prominent, irregular shells. Profiles are parameterized with Gauss-Hermite polynomials (van der Marel & Franx ApJ 407 1993; Rix & White MNRAS 254 1992). The fastest rotation ($\sim 50 \text{ km s}^{-1}$) and steepest central velocity gradient along the intermediate photometric axis rules out the possibility that NGC 474 is a face-on S0 (Schombert & Wallin AJ 94 1987) and suggests that it is triaxial. The asymmetry of the LOSVDs (h_3 up to 0.08) indicates the presence of a subsystem with rapid, ordered rotation. The minor axis velocity curve shows a kinematic feature at $3\text{--}4''$ east of the nucleus, with no associated h_3 or h_4 features. Non-parametric LOSVD analysis (unresolved Gaussian decomposition, Kuijken & Merrifield MNRAS 264 1993) reveals a double-peaked profile at that location. In all position angles line-profiles are distinctly pointy for radii up to $2''$, and are consistent with zero further out. We have found similar central positive h_4 terms in the shell galaxy NGC 2865 (Hau et al. MNRAS *in prep*). Cores with pointy LOSVDs are uncommon in ellipticals (Bender, Saglia & Gerhard MNRAS 269 1994). Positive h_4 terms might contain important clues on the shell-formation mechanism in ellipticals.