pectral range, from ultraviolet (λ3650 A) to infrared λ8650 A).

The étalon and CS-100 Queensgate controller uses apacitive micrometers and piezoelectric actuators ogether with a feedback control system in order to ninimize the errors. The CS-100 allows for the adustment of the servosystem parameters, the paralelism, and the separation between plates with a reponse time of 0.5 seconds in steps of 0.5 nm.

A measure of the sharpness of interference fringes s given by its FWHM. This measurement indicates ıow rapidly the irradiance falls to either side of the naximum. Another quantity of particular interest is he ratio between the separation of adjacent maxima ınd the FWHM known as "Finesse".

The CS-100 functions are capable of operating hrough a control bus which permits its remote ontrol by means of an octagon microcomputer PC5080) based on a 64180 12-bits processor. All his system will be supervised by a Sun or PC486 ıost computer.

EVOLUTION OF SUPERNOVA REMNANTS

A. Santillán[1,2], M. Różyczka[3], J. Franco[1], and G. Tenorio-Tagle[4]

Ve are currently making a comprehensive study f the evolution of supernova remnants under a vide variety of interstellar conditions. These conlitions cover the range of observed parameters for he medium surrounding the supernova progenitors, ınd a detailed description of the models will be preented elsewhere. The simulations are done with the wo-dimensional hydrodynamical code described by Różyczka (1985, A&A, 163, 59). The essential feaures of this code are the second-order accuracy in patial coordinates and the axial symmetry imposed n modeled flows. The cylindrical grid was composed f 100 × 100 points in the R and z coordinates, covring a physical area of $2 \times 10^{18} \times 2 \times 10^{18}$ cm^2.

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HIGH VELOCITY EJECTA FROM ETA CARINAE

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Recent *HST* imagery of Eta Carinae (Hester et al. 1991, AJ, 102, 654; Ebbets et al. 1993, 34th Hertsmonceux Conference, in press) show remarkable structures in this system arising from the major shell ejection episode during the mid-19th century from a (once!) LBV star. This high resolution structure is compared with numerous velocity features evident on longslit echelle spectra of several locations across the Eta Car system taken with the CTIO 4-m telescope. Radial, tangential, and space velocities for the various parts of the complex system are presented. The highest velocity structures are consistent with being ejected in the mid-19th century, although numerous slower moving (previously ejected) components in the system are evident as well.

Overall, the kinematics of the different parts of the system are consistent with the basic shell model of Hester et al., except that the "South Ridge" is now interpreted to be a previously ejected shell (~300 yrs old; $v_{exp} \approx 800$ km s^{-1}) –rather than just limb-brightened "cap" of emitting material. Finally, the *HST* imagery of the Ridge show numerous small knots embedded in the more diffuse ridge material, which apparently are the high velocity knots ($v \sim 10^3$ km s^{-1}) previously noted by Dufour (1989, RevMexAA, 18, 87).

GAS AND DUST OF W49A

R. Miyawaki[1], M. Hayashi[2], and T. Hasegawa[3]

The W49A molecular cloud complex is one of the most active star forming regions in the Galaxy. A ring of over a dozen compact H II regions ionized by O4-O7 stars with rotation are found within an area of 1 or 2 arcmin (several pc at the adopted distance of 12 kpc) in diameter. They are associated with a massive core with $M_c \sim 10^5\ M_\odot$.

We have obtained 450 μm and 1100 μm maps by using a JCMT 15-m telescope. Both maps covered only the northern region of W49 (W49N). The peak flux densities are 510 Jy/beam and 30.8 Jy/beam at 450 μm and 1100 μm, respectively. The 450 μm map resembles the ^{13}CO map (Miyawaki et al. 1994, in preparation) with the extent of 30 × 30 arcsec^2 ($\alpha \times \delta$) at half maximum level. The 450 μm map has two elongations; one is towards the southeast, and the other in the northeast-southwest direction. The 1100 μm map resembles a CS map (Miyawaki et al. 1986, ApJ, 305, 353) and 1-mm continuum