1	The Arizona-New Mexico Spectroscopic Survey of Galaxies. III. On Galaxy Populations	We examine the population statistics for two samples of galaxies in the direction of the Perseus supercluster. One sample, with N=258 galaxies having M_B<=-19.52+5log(h) and v_h<=8000 km s⁻¹, is complete for those galaxies within the boundaries of our survey region that have apparent magnitudes m_p<=15.0 in the Zwicky catalog. A more restrictive sample with N=177 galaxies having M_B<=-20.00+5log(h) (with the same redshift range) is complete in both luminosity and volume. We derive the statistics for the relative incidence of galaxies in the following spectroscopic classes: (1) absorption line only, (2) collisionally-excited emission lines only, (3) nuclear H II region, (4) starburst, (5) LINER, and (6) Seyfert 1.8-2.	2000-02-01	Gregory, Stephen A.; Tifft, William G.; Moody, J. Ward; Newberry, Michael V.; Hall, Shannon M.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=2000AJ....119..573G&db_key=AST&high=3a981db56020172
2	The Arizona-New Mexico Spectroscopic Survey of Galaxies. II. Structures in the Perseus Supercluster	Using new redshift data reported in Gregory et al., we examine the structure of the Perseus supercluster. We discuss in detail three filaments lying in the plane of the sky on the western end of the supercluster that are distinct from each other in redshift and/or position. Additionally, radially directed filaments are found, and it appears that all of the filaments in the region are connected. We speculate that an important feature of filamentary structures may be the fact that many, if not all of them, connect in such a way as to form complete loops or rings. Underdense regions that border our filaments may not be very representative of the now classical cosmic void, in that their structures are not predominantly spheroidal.	2000-02-01	Gregory, Stephen A.; Tifft, William G.; Moody, J. Ward; Newberry, Michael V.; Hall, Shannon M.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=2000AJ....119..567G&db_key=AST&high=3a981db56020172
3	The Arizona-New Mexico Spectroscopic Survey of Galaxies. I. Data for the Western End of the Perseus	We present new optical spectroscopic data for 347 galaxies in the region of the Perseus supercluster. The new data were obtained using the Steward Observatory 2.3 m telescope and cover the whole optical window. Included are redshifts (for 345 objects), absorption-line equivalent widths, a continuum index measuring the 4000 Å break, and emission-line flux ratios. After 11 objects are rejected for being too faint and redshifts for 26 objects are added from the literature, we arrive at a complete sample of 361 galaxies. The distribution of redshifts for the whole sample is examined, and we show the relationship of the continuum index to morphology.	2000-02-01	Gregory, Stephen A.; Tifft, William G.; Moody, J. Ward; Newberry, Michael V.; Hall, Shannon M.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=2000AJ....119..545G&db_key=AST&high=3a981db56020172

4	Global Redshift Periodicities and Periodicity Variability	Redshifts of local galaxies are examined for quantization and variability after transformation to the cosmic background rest frame. Ordinary spiral galaxies with 21 cm profile widths near 200 km s-1 show periodic redshifts, and what appears to be variability between levels, at a predicted period near 18.3 km s-1 and its higher harmonics. Evidence for variability is based on several independent sets of data. The asymmetry of 21 cm profiles seems to be related to the ordering of galaxies within transition sequences between quantized redshift levels. Galaxies near 200 km s-1 in profile width appear to populate a transition region in quantization properties. As wider profile spirals are examined, the 18.3 km s-1 periodicity is replaced by a 5.76 km s-1 periodicity belonging to a different family of predicted periods. A similar transition in properties occurs at the boundary between common spirals and dwarf galaxies with intermediate width 21 cm profiles. The ordinary dwarf galaxies show a 46.1 km s-1 period belonging to the same family of predicted periods found for wide profile spirals. The periods involved in the study are predicted by the three-dimensional time model described by Tifft in 1996. Certain families and ranges of periods are preferred. It appears that galaxies can be divided into several distinct classes within which we find both similar morphological and quantization properties. A discussion of binomial statistical testing of period fits is given in an appendix.	1997-08-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1997ApJ...485..465T&db_key=AST&high=3a981db56024479
5	Redshift quantization in the cosmic background rest frame.	Not Available	1997-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1997JApA...18..415T&db_key=AST&high=3a981db56024479
6	Global Redshift Periodicities and Periodicity Structure	A formula has been derived which matches global redshift periodicities. Observed periodicities appear to be contained within the set of integral negative ninth roots of 2 times the speed of light. Galaxy samples from the Virgo cluster, the Perseus and Cancer supercluster regions, and local space, are examined for periodicities as viewed from the cosmic background rest frame. Numerous periodicities are present, most of which are coincident with periods given by the ninth- root rule; periodicities associated with previously postulated 72 and 36 km s^-1^ periods are especially strong. Some classes of local galaxies are also periodic in a galactocentric rest frame. The strength of specific periods depends upon galaxy type as characterized primarily by the width of the 21 cm profile. Variation of the width range shifts power between harmonics but does not induce new periods. Using a previously predicted dependence of periodicity on z and q_0_ we confirm that q_0_ is consistent with a value of 1/2.	1996-09-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1996ApJ...468..491T&db_key=AST&high=3a981db56024479

7	Quantum Cosmology	Not Available	1996-04-01	Tifft, W. G.; Cocke, W. J.; Devito, C. L.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1996Ap%26SS.238..247T&db_key=AST&high=3a981db56024479
8	Global Redshift Periodicities: Association with the Cosmic Background Radiation	Not Available	1996-01-01	Cocke, W. J.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1996Ap%26SS.239...35C&db_key=AST&high=3a981db56024479
9	Three-dimensinal quantized time in Cosmology	Not Available	1996-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1996Ap%26SS.244..187T&db_key=AST&high=3a981db56024479
10	Evidence for quantized and variable redshifts in the cosmic backgroung rest frame.	Not Available	1996-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1996Ap%26SS.244...29T&db_key=AST&high=3a981db56024479
11	A Brief History of Quantized Time	Not Available	1995-10-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1995Mercu..25...12T&db_key=AST&high=3a981db56024479
12	Redshift Quantization - A Review	Not Available	1995-05-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1995Ap%26SS.227...25T&db_key=AST&high=3a981db56024479
13	A brief history of quantized time.	Not Available	1995-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1995Mercu..24e..12T&db_key=AST&high=3a981db56024479
14	Properties of the redshift. IV - Reference data	Comparisons between new 21 cm redshifts and older data, especially older 300 foot telescope data, were used in conjunction with Paper III of this series to demonstrate the presence of systematic deviations in the older data. This paper summarizes the evaluation of the older data including corrections for a linear velocity approximation, present in reduction software used. The corrections do not alter the pattern of deviations significantly. Quality evaluations for the older data indicate that the accuracy of the data has been underestimated.	1992-04-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1992ApJS...79..183T&db_key=AST&high=3a981db56024479

15	Properties of the redshift. III - Temporal variation	Comparisons between new 21 cm redshifts and older data, especially older 300 foot telescope data, are used to demonstrate the presence of systematic deviations, toward higher redshifts, in all the older data. The deviations frequently contain several components inconsistent with simple random spread. A linear velocity approximation, present in some reduction software, is discussed and shown not to be a factor in the deviations. The deviations are shown to relate to global quantization. Displacements correlate with global redshift phase and are interpreted as real time-dependent changes in redshift. Global quantization is rediscussed, taking time variability into account. Slight adjustments in period and solar motion are shown to produce strong time-dependent correlations for all types of galaxies. In particular, galaxies of intermediate profile width, previously not demonstratively globally quantized, now show strong periodicities. Both 21 cm profile width and shape are important parameters in the correlations.	1991-12-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1991ApJ...382..396T&db_key=AST&high=3a981db56024479
16	Variability of the broad line spectrum of Markarian 372	Spectroscopic observations of the AGN galaxy Mrk 372 are reported. In 1986 the spectrum was that of a Seyfert type 1.5 with very broad permitted lines and modestly broadened forbidden lines. In 1990 the spectrum is that of a Seyfert type 1.9. At H-beta, the broad line component disappeared leaving only a very weak, narrow line. Observations near H-alpha, however, do reveal the presence of a broad component.	1991-12-01	Gregory, Stephen A.; Tifft, William G.; Cocke, W. J.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1991AJ....102.1977G&db_key=AST&high=3a981db56024479
17	Statistical procedure and the significance of periodicities in double-galaxy redshifts	Newman et al. (1989) made four objections to Tifft’s (1980, 1982) analyses of the 72.45 km/s redshift periodicity. In this paper, each of the four objections are shown to be invalid. It is also shown that proper statistical procedures were followed by Tifft both in defining the 72.45 km/s period and in evaluating its significance.	1991-02-01	Cocke, W. J.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1991ApJ...368..383C&db_key=AST&high=3a981db56024479

18	Properties of the redshift. II - Radial variation	Precision high signal-to-noise ratio data, obtained within 1 year period at the Effelsberg 100 m telescope and the NRAO 300 foot (91 m) and 140 foot (43 m) telescopes, are used to determine the effect of resolution on 21 cm parameters. By comparing observations made with different beam sizes, profile widths are shown to continue to increase outward to the limit of the data. Redshift is also shown to vary radially for galaxies with significant rotating disks, widths more than 100 km/s. Nuclei of such systems are significantly blueshifted compared to outlying material, an effect difficult to understand if galaxies are optically thin at 21 cm. Profile shapes change radially in accord with the radial redshift variation. Galaxies with profile widths less than 100 km/s show a completely different pattern with no detectable change of redshift with radius. Systematic errors between radio telescopes are found to be vanishingly small after correction for differing resolution. Residual random errors are well below 1 km/s for S/N over 10, which permits very precise comparisons.	1991-02-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1991ApJ...368..105T&db_key=AST&high=3a981db56024479
19	Properties of the redshift. I - Data and calibrations	Data at 21 cm are presented for 100 galaxies intended to be used for system comparisons between the NRAO 140 and 300 foot telescope and the 100 m Effelsberg telescope. Data from the 300 foot telescope are also given for galaxies selected for overlap comparisons with older studies. Flux calibrations and measurement uncertainties in flux, redshifts, profile width, and profile shape are discussed.	1990-08-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1990ApJS...73..603T&db_key=AST&high=3a981db56024479
20	Comparisons between 21 CM data from Effelsberg and Greenbank	Comparison of 21-cm data from the Effelsberg 100-m and NRAO Greenbank 91-m telescopes are used to find the limiting precision for redshift measurement. At SNR levels of 10 or above, the random uncertainty actually achieved in a single redshift measurement is demonstrated to be 0.85 km/s at a bandwidth of 6.25 MHz. Uncertainty in other bands scales as the square root of the bandwidth relative to 6.25 MHz. Random error is also found to be independent of which telescope or software is used as long as the SNR is large. At low SNR the choice of software affects precision. Substantial systematic errors are shown to be present in some existing systems or software, due to errors in specifying the location of the center frequency. Such errors can easily be eliminated with standardized intercomparisons.	1990-07-01	Tifft, W. G.; Huchtmeier, W. K.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1990A%26AS...84...47T&db_key=AST&high=3a981db56024479

21	Redshift quantization in the Ly-alpha forest and the measurement of q(0)	Evidence is presented for redshift quantization in the Ly-alpha forest of several QSOs. The Ly-alpha data are at redshifts z from 1.89 to 3.74, and the theory of redshift quantization proposed by Cocke is used to scale the quantization interval (24.15 km/s) to these high redshifts. The scaling depends on the deceleration parameter q(0), and the quantization is present at a statistical significance of greater than 99 percent for q(0) = 1/2. This may be taken as confirming the inflationary model of the early history of the universe. The significance of the quantization is highest at q(0) approximately equal to 0.48, and the width of the peak is about 0.03. The result can also be seen as providing confirmatory evidence for both the theory of the redshift quantization and the above value of q(0), but at a significance of only 95 percent. The scenario proposed for the relativistic generalization of the theory is that of fermion wave functions and quantum operators in a background Riemannian spacetime satisfying Einstein’s field equations.	1989-11-01	Cocke, W. J.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1989ApJ...346..613C&db_key=AST&high=3a981db56024479
22	Quantization of redshift differences in isolated galaxy pairs	Improved 21 cm data on isolated galaxy pairs are presented which eliminate questions of inhomogeneity in the data on such pairs and reduce observational error to below 5 km/s. Quantization is sharpened, and the "zero" peak is shown to be displaced from zero to a location near 24 km/s. An exclusion principle is suggested whereby identical redshifts are forbidden in limited volumes. The radio data and data from Schweizer (1987) are combined with the best optical data on close Karachentsev pairs to provide a cumulative sample of 84 of the best differentials now available. New 21 cm observations are used to test for the presence of small differentials in very wide pairs, and the deficiency near zero is found to continue to very wide spacings. A loss of wide pairs by selection bias cannot produce the observed zero deficiency. A new test using pairs selected from the Fisher-Tully catalog is used to demonstrate quantization properties of third components associated with possible pairs.	1989-01-01	Cocke, W. J.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1989ApJ...336..128T&db_key=AST&high=3a981db56024479
23	Uncertainties in 21 centimeter redshifts. I - Data	High-precision data on the 21-cm redshifts, profile widths, and shapes for 625 galaxies are presented. Each galaxy is listed in a cross-identification and morphology table. High-resolution spectra are also given for each galaxy. Internal redshift consistency is roughly 1 km/s for galaxies for which the S/N is above 15. No systematic effects have been found which might influence the observed redshift quantization at 72.5 km/s or its submultiples.	1988-05-01	Cocke, W. J.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1988ApJS...67....1T&db_key=AST&high=3a981db56024479

24	Redshift studies of large-scale structure. II - A faint sample in the direction of the Coma/A1367 su	A total of 26 new redshifts are reported for 16th magnitude galaxies in the direction of the Coma void and Coma/A1367 superclusters. No galaxies are found to lie in the void. The supercluster is shown to be distinctly separate from a near-background population. A large void is found with V = about 13,000-19,000km/s, and a massive supercluster is found with V = about 19,000-23,000 km/s.	1988-03-01	Gregory, Stephen A.; Moody, J. Ward; Tifft, William G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1988AJ.....95..662G&db_key=AST&high=3a981db56024479
25	Redshift studies of large-scale structure. I - The south Coma void region	This paper is the first of a series of Steward Observatory redshift surveys aimed at relatively faint galaxy samples covering small areas of the sky of known importance for large-scale-structure programs. This sample of 92 galaxies includes the region alpha = 12 h 30 min - 13 h 30 min, delta = 18-26 deg, complete for m(p) = 15.7 or less. No additional galaxies are found in the Coma void, and the void is not well described as a "bubble". The surveyed supercluster regions appear to have a normal luminosity function.	1988-03-01	Tifft, William G.; Gregory, Stephen A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1988AJ.....95..651T&db_key=AST&high=3a981db56024479
26	A spectroscopic survey of case emission-line galaxies in the direction of the Bootes void	Redshifts are reported for 44 objects in the list of emission-line objects published by Sanduleak and Pesch in 1982. Two or these are found to be high-redshift quasars, three are galactic stars, three are galaxies with absorption lines only, five are unidentified objects with no emission lines, and the remaining 31 are emission-line galaxies. A wide variety of emission lines strengths is found for each of the Sanduleak and Pesch emission classes except the strongest. The estimated redshifts for galaxies given by Sanduleak and Pesch correlate well with the measured redshifts. The distribution of the emission line galaxies is not homogeneous and is similar to that of galaxies from the CfA survey in the overlapping region. Seven of the galaxies are found near the boundaries of the large Bootes void, and two lie within the void boundaries drawn by Kirshner and colleagues in 1983. The question of whether the void could be populated with low-luminosity galaxies remains unanswered.	1986-11-01	Tifft, William G.; Kirshner, Robert P.; Moody, J. Ward; Gregory, Stephen A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1986ApJ...310...75T&db_key=AST&high=3a981db56024479

27	Double galaxy investigations. III - The differential redshift distribution and emission-line correla	The distribution of redshift differences for a sample of 250 close double galaxies is shown to depend strongly upon the emission properties of the component galaxies and to some extent upon interaction morphology. The distribution is not significantly dependent either upon physical or angular separation or upon the magnitude differential. The Delta-V distribution can be decomposed into a sharply peaked component with dispersion about 100 km/s characterized by emission objects, and a broad component with dispersion about 300 km/s characterized by absorption spectra. Within these two components, especially the sharply peaked one, there appears to be a dependence of emission strength, and to a lesser extent interaction morphology, upon physical separation in the range 5-20 kpc.	1985-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1985ApJ...288...65T&db_key=AST&high=3a981db56024479
28	Global redshift quantization	The Fisher-Tully (1981) survey of 21-cm late-type galaxy redshifts exhibits sharp periodicities at exact, 1/3- and 1/2-multiples of 72.45 km/sec; this allows the precise determination of the solar motion of (theta, pi, z) = (231 + or - 2, -35 + or - 3, and 1 + or - 2) km/sec, respectively, to be derived. The 1/3-periodicity, of 24.1 km/sec, pertains to galaxies with narrow 21-cm profiles, while the 1/2-resonance, at 36.2 km/sec, applies to those with wide profiles. The two data sets are noted to independently yield the same solar motion velocity components. The overall statistical confidence level associated with these results is very high.	1984-12-01	Tifft, W. G.; Cocke, W. J.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1984ApJ...287..492T&db_key=AST&high=3a981db56024479
29	Redshift quantization in compact groups of galaxies	Radio data (21 cm) on the redshifts of galaxies in small groups are analyzed for the previously reported 72 km/s quantization. The redshift differentials definitely clump about multiples of 72 km/s, at a confidence level of 99.5 percent. The detailed deviations of the data from exact quantization are discussed in terms of the superposition of redshift states.	1983-05-01	Cocke, W. J.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1983ApJ...268...56C&db_key=AST&high=3a981db56024479
30	Double galaxy investigations. I - Observations	Redshift information from 240 A/mm spectrograms is presented for 370 double arcsec galaxy systems from the Karachentsev (1972) catalog, including all pairs in that catalog with separation less than 80 arcsec. An extensive error discussion utilizing internal and external (21 cm) comparisons provides calibration of systematic error and determines the uncertainty for a typical high weight optical redshift to be plus or minus 65 km/sec. Internal differential redshifts within single spectra using common lines achieve accuracies of 18-30 km/sec, depending upon separation, and are available for about 200 pairs. Extensive information on emission and other properties is also provided.	1982-12-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1982ApJS...50..319T&db_key=AST&high=3a981db56024479

31	Double galaxy investigations. II - The redshift periodicity in optically observed pairs	The new sample of optically observed double galaxies is tested for the 72 km/sec periodicity. The periodicity is present in the 200 pair high weight sample at or above the 99% confidence level. Detection varies between subsamples in accord with variation in data uncertainty as expected. Uncertainties in delta-V inferred from the visibility of the periodicity are in close accord with directly determined internal delta-V errors. The result is not dependent upon inclusion or exclusion of the zero peak.	1982-11-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1982ApJ...262...44T&db_key=AST&high=3a981db56024479
32	Quantum effects in the redshift intervals for double galaxies	An improved sample of 31 double galaxies with accurate radio redshifts is defined and analyzed for the 72 km/sec discrete redshift interval effect. The effect is present at the 99.8% confidence level. Some doubles show significant deviations from the principal peaks and are consistent with a population of small peaks midway between (i.e., at 36 km/sec intervals). The width of the main peaks is slightly but not significantly larger than expected from observational error. Underlying natural width or structure in the main peaks cannot introduce a scatter much in excess of 6 km/sec. A sample of 30 new accurate optical redshift differentials shows the same periodicity.	1982-06-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1982ApJ...257..442T&db_key=AST&high=3a981db56024479
33	The Perseus supercluster	Results are presented of a redshift survey of galaxies with photographic magnitudes less than or equal to 14.0 located between 0 h 15 min and 3 h 20 min RA and 26 and 45 deg dec, the region identified with the Perseus supercluster. New redshifts are reported for 116 galaxies, and are combined with literature data to obtain values for a total of 141 galaxies in the region. Morphological classifications, diameters, position angles and ellipticities are also presented for all 141 galaxies. The 116 galaxies in the sample with radial velocities between 3700 and 9000 km/sec are found to form a supercluster with a filamentary structure including the Perseus, A347, A262, NGC 383 and NGC 507 clusters and with a mean velocity of 5327 km/sec. It is estimated that superclusters occupy approximately 1% of the universe, with a mean free path between superclusters of 285/h Mpc. Results support the view that cluster- and supercluster-mass clouds fragment before galaxies and communicate anisotropic matter and velocity distributions to galaxies. The results are also noted to be consistent with intrinsic galactic redshifts and band structure.	1981-01-01	Gregory, S. A.; Thompson, L. A.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1981ApJ...243..411G&db_key=AST&high=3a981db56024479

34	Double galaxies as indicators of large scale structure	Northern-hemisphere double galaxies are shown to contain large-scale clumping in the form of clouds associated into four or five major large-scale filamentary structures. The filaments are on the order of 10 Mpc thick and 100 Mpc long. Position angles of the doubles are aligned regionally, and the alignment varies in a regular manner within the large-scale structure. Clusters within the structures appear to have elongations which fit the orientation pattern defined by doubles. Sections of the structures, where the viewing angle is largely transverse, show an asymmetry where the brighter, more nucleated component is preferentially on one side followed by a reversal and a section with opposite orientation. In structures seen nearly radially a regular pattern of orientation change of 180 deg appears to occur every 3000 km/s in redshift. Both clockwise and counterclockwise rotation are present, but otherwise the pattern of change appears identical.	1980-07-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1980ApJ...239..445T&db_key=AST&high=3a981db56024479
35	Periodicity in the redshift intervals for double galaxies	Radio and optical redshifts from Peterson for double galaxies are shown to contain a strong periodicity in the redshift intervals.	1980-02-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1980ApJ...236...70T&db_key=AST&high=3a981db56024479
36	The Hercules supercluster. I - Basic data	A sample of more than 150 redshifts, the majority new, is presented for galaxies brighter than an apparent photographic magnitude of 15.8 in a 28-square-deg field in Hercules containing the clusters A2151, A2152, and A2147. This sample populates a 60,000 cu Mpc conical volume. It contains a super-cluster centered near a radial velocity of 11,000 km/sec a large void of depth approximately 100 Mpc in front of the supercluster, and foreground structure at 4700 and 2300 km/sec the former associated with Seyfert’s sextet.	1979-12-01	Tarenghi, M.; Tifft, W. G.; Chincarini, G.; Rood, H. J.; Thompson, L. A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1979ApJ...234..793T&db_key=AST&high=3a981db56024479
37	Structure within redshift-magnitude bands - Morphological evolution	The distribution of redshifts within individual redshift-magnitude bands contains a significant periodic structure of "X-groups" which cross the bands at a steep angle. Six independent cluster samples indicate that the pattern appears to be fixed in redshift and magnitude. Five compact E-dominated groups of galaxies are superposed and shown to concentrate at the boundaries between X-groups. Morphology is shown to be ordered across X-groups, suggesting evolutionary sequences linking groups. All correlations are demonstrated with several independent data samples.	1979-11-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1979ApJ...233..799T&db_key=AST&high=3a981db56024479

38	Band theory applied to the Coma/A1367 supercluster	Predictions from redshift-magnitude band theory are tested against observations in the Coma/A1367 supercluster. Bands, associated vertical sequences, and morphological correlations are found. The structure of superclusters is discussed in the light of both conventional and band theory. Conventional theory may require a rather unusual geometry, while band theory matches the observations in a simple manner.	1979-07-01	Tifft, W. G.; Gregory, S. A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1979ApJ...231...23T&db_key=AST&high=3a981db56024479
39	New redshifts of parent galaxies of supernovae	Redshifts of thirty-five parent galaxies of supernovae have been measured on spectrograms taken with the 90-inch Steward and 48-inch Asiago reflectors. Twenty-six new redshifts raise the sample of known redshifts of supernova parent galaxies to 47 percent. Detailed discussion of observed spectral features is provided for each galaxy. Comparison of the subset of determinations in common with the second Reference Catalog of Bright Galaxies proves satisfactory.	1979-04-01	Barbon, R.; Capaccioli, M.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1979A%26AS...36..129B&db_key=AST&high=3a981db56024479
40	Redshift-magnitude bands and the evolution of galaxies. II - Data analysis	Data from the Coma, Perseus, and A 1367 clusters are taken together with data from QSS to provide information on slope and location of redshift-magnitude bands. Both slope and location are found to be fairly constant in comparisons of one cluster with another. An analysis of the Perseus cluster shows a distinct change in redshift-magnitude and mean redshift with radius. This radial brightening trend is applied to observations of the Coma cluster, as well, noting that the outer part of the cluster contains the same band pattern as the core. The analysis is also extended to low redshifts in an attempt to construct an empirical model of band and galactic evolution.	1978-06-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1978ApJ...222..421T&db_key=AST&high=3a981db56024479
41	Redshift-magnitude bands and the evolution of galaxies. I - New observations	Well-defined samples of galaxy redshifts and magnitudes for the Perseus and A1367 clusters are obtained from a combination of new and existing observations. For the Perseus cluster, identifications, 1950 positions, distance from cluster center in degrees, m_p and V(6) magnitudes, redshifts corrected for earth orbital and galactic rotation, and comments are provided. Information for the 50 central A1367 galaxies includes identification, m_{p,} redshift and redshift source, morphology, and comments.	1978-05-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1978ApJ...222...54T&db_key=AST&high=3a981db56024479

42	The absolute solar motion and the discrete redshift	The concept of the discrete redshift is applied to dwarf-galaxy H I redshifts and line profiles. After removing the solar motion derived from the data, it is shown that strong periodicities predicted by the discrete-redshift model are present. Strong related correlations exist in line-profile shape. A model of the redshift based upon ultimate discrete levels uniformly spaced near 12 km/s is developed. Each cycle of 72 km/s contains a pattern of six sublevels. A model of redshift levels in terms of energy changes is also introduced.	1978-05-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1978ApJ...221..756T&db_key=AST&high=3a981db56024479
43	The discrete redshift and asymmetry in H I profiles	A classification system for galaxy H I profiles is presented which takes note of the asymmetrical distribution of intensity. The distribution of asymmetry is shown to relate to line width in a distinctly nonrandom manner. The asymmetry can be related directly to properties of the redshift when interpreted as a discrete variable.	1978-04-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1978ApJ...221..449T&db_key=AST&high=3a981db56024479
44	A radio continuum survey of isolated pairs of galaxies	The observational results of a radio-continuum survey of isolated pairs of galaxies from the catalog of Karachentsev (1972) are presented. Detailed radio and optical data exist for the 61 detections above the all-catalog limit of 40 mJy at a wavelength of 11 cm. Three interesting classes of radio detections are discussed, including seven pairs with radio halos larger than and/or not coincident with the optical extent of the galaxies.	1978-04-01	Stocke, J. T.; Tifft, W. G.; Kaftan-Kassim, M. A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1978AJ.....83..322S&db_key=AST&high=3a981db56024479
45	The Simkin effect	The Simkin (1977) effect is discussed for Steward Observatory spectrogram measurements and shown by K-H residuals and comparisons with other redshift sources, including sky-substracted values, probably not to exceed 30 km/s. Large effects are, however, shown to exist in Kintner (1971) and other redshift sources - up to + or - 400 km/s - while the Humason, Mayall, and Sandage (1956) redshifts appear to be unaffected. The effect that is seen appears to be explained entirely by 4047-A mercury interference and to be virtually independent of galaxy magnitude. Such interference cannot explain redshift-magnitude bands in either form or amount of shift.	1978-03-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1978ApJ...220..418T&db_key=AST&high=3a981db56024479
46	A group of galaxies in Cetus with a redshift discrepancy	Spectral observations of 6 galaxies in an isolated Cetus group were made. Two galaxies have redshifts appreciably different from the others. This could be due to an effect of projection of the pair on a group of four members.	1978-02-01	Karachentsev, I. D.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1978A%26A....63..411K&db_key=AST&high=3a981db56024479
47	Radio galaxies in the coma cluster. II	Optical data are presented for 50 galaxies in the Coma cluster, including all the known radio sources brighter than a photographic magnitude of approximately 17. The redshift distribution of the best radio-source sample deviates markedly from that of the cluster as a whole. The correlations of redshift with magnitude and radio flux at 610 MHz are given.	1977-11-01	Tift, W. G.; Tarenghi, M.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1977ApJ...217..944T&db_key=AST&high=3a981db56024479

48	Magellanic Cloud investigations. V - The LMC blue cluster NGC 1854	Photographic photometry of the LMC blue globular cluster NGC 1854 is presented. The main sequence appears 0.1 redder than the surrounding field population. The cluster contains both blue and red supergiants and stars which fall in the instability strip. The instability strip stars do not appear variable and may be binaries containing a main sequence star and a red supergiant. Difficulties are discussed concerning the determination of the ratio t_{br}. The age spread is found to be quite low and not incompatible with a value of zero.	1977-08-01	Connolly, L. P.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1977MNRAS.180..401C&db_key=AST&high=3a981db56024479
49	Discrete states of redshift and Galaxy dynamics. III - Abnormal galaxies and stars	The redshift pattern in M82 is shown to be consistent with the multiple-redshift concept, as are redshift differentials in other active objects. The presence of multiple-redshift states and the general lack, therefore, of violent motion appear consistent with all types of galaxies. Evidence is examined for effects of multiple-redshift effects in stars within our own Galaxy. Four possibilities are considered: interstellar material, pre-main-sequence objects, rotation in massive stars, and highly evolved or peculiar stars. All classes show evidence of the predicted redshift periodicity. Stellar rotation, in particular, is shown to occur preferentially in steps of 72.5 km/s. Implications of the correlations are briefly discussed.	1977-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1977ApJ...211..377T&db_key=AST&high=3a981db56024479
50	Discrete states of redshift and galaxy dynamics. II - Systems of galaxies	In the first paper in this series, a basic model was developed, for individual galaxies, consisting of two expanding opposed streams of material differing systematically in redshift. In this paper, galaxies in pairs and groups are shown to manifest no evidence of gravitational interaction. Redshift differentials between pairs of galaxies and between galaxies in clusters are found to take on preferred values which are various multiples of a basic 72.5 km/sec. There is also direct evidence that the redshift periodicity phases together between groups to imply that there is no large-scale motion between clusters of galaxies. The various mass discrepancies or peculiarities arising from a dynamical interpretation of differential redshifts are also shown to be of a form that no gravitational interaction and no significant motion require.	1977-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1977ApJ...211...31T&db_key=AST&high=3a981db56024479
51	Gross optical properties of the Coma cluster	The following properties of the main body of the Coma cluster are found: luminosity function, total apparent and absolute photographic magnitudes, the functional dependence of number and mass density with radius, total mass, average volume mass density, mean redshift and redshift distribution, and the variation of velocity dispersion with radius.	1976-06-01	Gregory, S. A.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1976ApJ...206..934G&db_key=AST&high=3a981db56024479

52	Direct observations of th large-scale distribution of galaxies.	Complete samples of galaxies in regions 3° and 6° in radius centered on the Coma cluster are presented. When grouped by redshift and position on the sky, virtually all the galaxies are shown to belong to groups or clusters. Truly isolated galaxies are nonexistent or very rare. Two types of galaxy groupings are found. The first contains a few galaxies in well-localized areas and shows a small redshift dispersion. Galaxies in such groups have a distinct tendency to show some emission lines. The second class of galaxy grouping is the major cluster. Associated with the Coma cluster, there appears to be an extended but highly asymmetrical shred of material which probably shows numerous subconcentrations. There is no evidence that the Coma cluster extends significantly beyond 3° as a symmetrical body.<p>The overall density of intergalactic space in the Coma cluster foreground is estimated to be about 10⁻³² gm cm⁻³. Only about 1 percent of the space is occupied by groups of galaxies.	1976-05-01	Tifft, W. G.; Gregory, S. A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1976ApJ...205..696T&db_key=AST&high=3a981db56024479
53	Discrete states of redshift and galaxy dynamics. I - Internal motions in single galaxies	This paper develops the concept that the redshift can occur only in specific discrete values. The key to the development is a dual-redshift model for individual galaxies. Well-known local galaxies, especially M31 in great detail, are shown to consist of two basic opposed streams of outflowing material which have an intrinsic difference of redshift of 70-75 km/s. A smooth symmetrical rotation and expansion curve coupled with the multiple-redshift model is sufficient to account for all the redshift data. The paper is almost entirely empirical and draws upon large amounts of the best data available on galaxies. Where definite differences exist in the form of the data as predicted by conventional dynamics and the discrete redshift concept, the data favor the latter.	1976-05-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1976ApJ...206...38T&db_key=AST&high=3a981db56024479
54	The NGC 507 cluster of galaxies	Redshifts and accurate positions for galaxies in the core of the NGC 507 group are presented. The group is shown to be closely similar to other groups of galaxies located nearby, including the Perseus cluster. A conventional virial analysis shows the usual excess kinetic energy. The redshift-magnitude diagram is consistent with the presence of bands.	1975-07-01	Tifft, W. G.; Hilsman, K. A.; Corrado, L. C.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1975ApJ...199...16T&db_key=AST&high=3a981db56024479

55	Radio galaxies in the Coma cluster	Redshifts for 23 possible radio galaxies with radio magnitudes of less than 17 in the field of the Coma cluster are reported and discussed. Of the 16 most likely cluster members, half are nonelliptical galaxies with emission lines in their spectra and the remainder are non-emission-line E or S0 galaxies. Except for two of the weakest sources, the galaxies have redshifts which average 600 km/s greater than the cluster mean. The excess redshift does not appear to depend upon emission-line properties or distance from the cluster center. The non-emission-line galaxies are brighter both optically and at radio wavelengths than the emission-line objects. A direct correlation of radio magnitude and redshift appears to exist for the non-emission-line radio sources.	1975-07-01	Tifft, W. G.; Tarenghi, M.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1975ApJ...199...10T&db_key=AST&high=3a981db56024479
56	Redshift dispersion in the X-ray cluster of galaxies A1367	Not Available	1975-05-01	Tifft, W. G.; Tarenghi, M.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1975ApJ...198L...7T&db_key=AST&high=3a981db56024479
57	A spectroscopic survey of some high-latitude blue variables	As part of a search for optically variable extragalactic objects, we obtained slit spectrograms of 32 high-galactic-latitude objects selected from the variable-star literature. One of the objects, V395 Her, is a distant galaxy, but we question its reported variability. The remaining objects are galactic variable stars; they include several eruptive variables, new RR Lyrae-type variables, and a variable white dwarf.	1974-12-01	Bond, H. E.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1974PASP...86..981B&db_key=AST&high=3a981db56024479
58	The degree of optical variability of quasi-stellar objects.	Information on optical variability of quasi-stellar objects (QSOs) is collected and analyzed in order to determine the effect of variability on the data which have been utilized in various statistical arguments. It is found that photometric observations of QSOs are uncertain due to short-term variability by amounts up to .25 to .50 minute of arc, with less than 10% of the QSOs being so variable that single measurements differ by 0.5 minute of arc.	1974-12-01	Grandi, S. A.; Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1974PASP...86..873G&db_key=AST&high=3a981db56024479
59	Digicon photometry of an intergalactic bridge	Surface brightness and color data are derived for two points in the bridge and tail structure of Arp 295. The best observed point has a surface brightness in V of 25.9 magnitudes per square arc second and (B-V) = +1.00 m. A point on the tail is brighter with the same color.	1974-10-01	Beaver, E. A.; Harms, R. J.; Tifft, W. G.; Sargent, T. A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1974PASP...86..639B&db_key=AST&high=3a981db56024479

60	The definition, visibility, and significance of redshift-magnitude bands.	Redshift-magnitude bands as they occur in the Coma cluster are formally defined, and the original bands observed in 1972 are shown to have a likelihood of random occurrence of only 0.005 independent of their direction. The properties of the Coma bands transformed to <I>m_p</I> magnitudes and used to show that an independent sample of outlying Coma galaxies shows strong band-related characteristics. The properties of the Coma bands are then used to predict band properties for the A2199 cluster. The resultant power-spectrum test of a preliminary A2199 sample shows agreement which has a random likelihood of occurrence of only 0.001. The A2199 cluster also shows a band-related morphological separation as in Coma.	1974-03-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1974ApJ...188..221T&db_key=AST&high=3a981db56024479
61	Investigation of the Cancer cluster of galaxies.	Redshifts for nine galaxies in the center of the Cancer cluster are reported. Four show emission lines and one of these galaxies is a high-excitation peculiar object showing a distorted dust lane and jet or edge-on disk structure. A conventional virial-theorem analysis of the cluster indicates a total cluster mass near 10¹⁴ <I>M</I>₀ and suggests that the usual instability problem found in galaxy clusters is present.	1973-10-01	Tifft, W. G.; Jewsbury, C. P.; Sargent, T. A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1973ApJ...185..115T&db_key=AST&high=3a981db56024479
62	Galaxy photometry. I. Techniques	Techniques for the derivation of nuclear magnitudes in galaxies are summarized. A new method for rapid estimation of nuclear magnitudes by iris photometry is presented and evaluated. It is concluded that with proper calibration, nuclear magnitudes for galaxies in clusters may be estimated with an uncertainty of about ±0.1 mag.	1973-09-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1973AJ.....78..594T&db_key=AST&high=3a981db56024479
63	Photoelectric Photometry of Some Galaxies in the Region of the Virgo Cluster	Four-color photometry of 26 galaxies, mostly in the region of the Virgo cluster, is presented.	1973-06-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1973PASP...85..283T&db_key=AST&high=3a981db56024479
64	Spectroscopy of outlying faint galaxies in the region of the Coma cluster.	Redshifts are reported for 27 outlying galaxies in Coma. Twenty-four have redshifts typical for Coma galaxies, and 11 galaxies show emission lines.	1973-04-01	Tifft, W. G.; Gregory, S. A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1973ApJ...181...15T&db_key=AST&high=3a981db56024479

65	Properties of the redshift-magnitude bands in the Coma cluster.	Redshifts of additional faint galaxies in the Coma cluster are given. A total of 108 galaxies with redshift and magnitude data is now available and is discussed with regard to both nuclear-region and total magnitude. The banded correlation previously discussed by Tifft is shown to be convergent toward zero redshift and possibly to possess a discrete structure along each band which correlates with galaxy angular momentum. The statistical significance of the banded correlation is investigated by power-spectrum analysis, and implications of the correlations are briefly discussed.	1973-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1973ApJ...179...29T&db_key=AST&high=3a981db56024479
122	Is The Redshift Quantized?, Variable?, The Empirical Period, 1973 to 1992, Learning About z	As the number and quality of redshift data increased in the 1970s problems with the classical interpretation of the redshift became worse. It became increasingly evident that the redshift was apparently a quantized quantity. Alternate models of the nature of galaxies were considered, and tests for quantized redshifts were carried out using galaxy pairs. Precision 21 cm radio measurements of redshifts became available in the late 1970s and quantized redshifts were demonstrated on the global scale in the 1980s. Comparisons between new and old redshifts further suggested that redshift transitions between quantized levels could be occurring. Is the large scale, like the small scale, a quantized domain? Are there consistent patterns present which suggest a model for redshift quantization? Is there an optimum rest frame associated with redshift quantization? The completely empirical phase of redshift quantization was coming to a close.	2000-11-01	Tifft, W. G.	NULL
105	Figure test 2	No Abstract	2002-08-01	Tifft, W. G.	NULL
66	The Correlation of Redshift with Magnitude and Morphology in the Coma Cluster	To Follow	1972-08-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1972ApJ...175..613T&db_key=AST&high=3a981db56024479
67	NGC 2818, an open cluster containing a planetary nebula	To Follow	1972-01-01	Tifft, W. G.; Conolly, L. P.; Webb, D. F.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1972MNRAS.158...47T&db_key=AST&high=3a981db56024479
68	Star Clustering Near the NGC 68-72 Group of Galaxies	To Follow	1971-12-01	Tifft, W. G.; Gregory, S. A.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1971PASP...83..810T&db_key=AST&high=3a981db56024479
69	Magellanic cloud investigations. III. the LMC bar.	To Follow	1971-01-01	Tifft, W. G.; Snell, C. M.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1971MNRAS.151..365T&db_key=AST&high=3a981db56024479
70	Multicolor Photoelectric Photometry of Bright Galaxies. III	To Follow	1969-04-01	Tifft, William Grant	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1969AJ.....74..354T&db_key=AST&high=3a981db56024479

71	Proceedings of the Conference on Seyfert Galaxies and Related Objects: 24. Photometric Anomalies in	Not Available	1968-11-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1968AJ.....73..879T&db_key=AST&high=3a981db56024479
110	What Is the Cosmic Redshift? Correlations and Implications, 1970-1978	Classical Big-Bang cosmology was built on a framework of theory combined with the very first redshift measures. Serious testing relating to the nature of the redshift was not possible until much later. Studies caried out in the 1970s found correlations inconsistent with classical interpretations of the redshift. Intrinsic properties of galaxies appear to play a role in fixing redshifts. Galaxies do not behave like simple masses under control of gravity. Does gravity apply on the scale of galaxies? Is the redshift some intrinsic evolving property built into galaxies? Some serious studies of galaxies and the redshift were clearly warranted.	2000-10-01	Tifft, W. G.	NULL
72	DH Pegasi, an RR Lyrae Star of Type "c".	To Follow	1964-02-01	Tifft, William G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1964ApJ...139..451T&db_key=AST&high=3a981db56024479
73	Multicolor Photoelectric Photometry of Bright Galaxies. II	To Follow	1963-06-01	Tifft, William Grant	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1963AJ.....68..302T&db_key=AST&high=3a981db56024479
74	Magellanic Cloud investigations, II. 47 Tucanae	To Follow	1963-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1963MNRAS.126..209T&db_key=AST&high=3a981db56024479
75	Magellanic Cloud investigations, I. The region of NGC 121	To Follow	1963-01-01	Tifft, W. G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1963MNRAS.125..199T&db_key=AST&high=3a981db56024479
76	Multicolor photoelectric photometry of bright galaxies. I.	To Follow	1961-10-01	Tifft, W., G.	http://adsabs.harvard.edu/cgi-bin/nph-bib_query?bibcode=1961AJ.....66..390T&db_key=AST&high=3a981db56024479
121	Test Mkdir	abstract	2002-11-01	Tifft, W. G.	NULL

123	Redshifts and the Dimensions of Time, Defining the Properties of a New Cosmology, 1993 to Date	Events in the early 1990s dramatically influenced redshift quantization work. Independent work in England confirmed quantization which heightened interest in the work. About the same time a transformation to the cosmic background rest frame was found to optimize global quantization, linking quantization solidly to cosmology. Finally reports of the work reached Ari Lehto, a Finnish physicist, who had developed some concepts which allowed one to predict possible redshift quanta and properties of fundamental particles. Subsequent testing of redshift quantization in major global samples has confirmed the presence of specific quantization intervals predicted by the model and has led to the formulation of a set of equations describing permitted quanta. Inherant in the model is the suggestion that time is a 3-dimensional quantity. Modern evidence for redshift quantization will be summarized.	2000-11-01	Tifft, W. G.	NULL
104	Redshift Periodicities, The Galaxy-Quasar Connection (Outline Form)	No Abstract	2002-06-01	Tifft, W. G.	NULL
108	Test of Instruction Figure Blocks	No abstract	2002-09-01	Tifft, W. G.	NULL
109	Testing no pictures	No Abstract	2002-10-01	Tifft, W. G.	NULL
107	Redshift Periodicities, The Galaxy-Quasar Connection	The Lehto-Tifft redshift quantization model is used to predict the redshift distribution of certain classes of quasars, and for galaxies in the neighborhood of z=0.5. In the Lehto-Tifft model the redshift is presumed to arise from time dependent decay from an origin at the Planck scale; the decay process is a form of period doubling. Looking back in time reveals earlier stages of the process where redshifts should correspond to predictable fractions of the speed of light. Quasar redshift peaks are shown to correspond to the earliest simple fractions of c as predicted by the model. The sharp peaks in deep field galaxy redshift surveys are then shown to correspond to later stages in such a decay process. Highly discordant redshift associations are expected to occur and shown to be present in the deep field surveys. Peaks in redshift distributions appear to represent the spectrum of possible states at various stages of the decay process rather than physical structures.	2002-06-01	Tifft, W. G.	NULL