A BLUSTERY BEGINNING — Last week's heavy snowfall, frigid temperatures and wind drove students on campus to seek shelter. The weather forced students to cover the campus is shown here from Stewart Tower, which connects Waldo Library and the University Computing Center. The weather caused University officials to cancel classes after 3:30 p.m. Thursday and Friday and forced the cancellation of Thursday's Faculty Senate meeting.

WMU physicist will use $900,000 federal grant to illuminate the secrets of molecular structure

To shed light on the fundamental secrets of atomic and molecular structure, a WMU faculty member and her national research team will use one of the brightest photon sources to help solve some of the world's most pressing problems.

Nora Berrah, physics, has received federal funding to head a national team of scientists who will work at the Advanced Light Source facility at Lawrence Berkeley National Laboratory in California. The 15 members of her team, who hail from 12 national laboratories and universities, will use $900,000 in funding from the U.S. Department of Energy over the next three years to conduct basic research. Working at a research station at the ALS facility, they will focus an intense photon beam on atoms and small molecules to break them apart and better understand their makeup.

Berrah says the team will be using the ALS, a large research tool nearly the size of a football field, to gain a better understanding of the smallest building blocks of life. The ALS produces a photon beam that, because of its intense, focused nature, is actually brighter than the sun.

"The photons are like a probe. They disturb my samples, forcing them to send off electrons and then we record those emissions," Berrah says of the technique. "The result is like a microscopichoto of extreme detail that allows us to discern the constituent parts of matter."

Such basic research, Berrah says, may ultimately lead to a cleaner environment, better consumer products, more effective medicines and even a better understanding of the origin of stars and planets.

The ALS facility is run by the Department of Energy to allow researchers from industry, universities and government laboratories to undertake scientific research and development using the special characteristics of light produced there. Those include very high brightness, fast pulse and the ability to tune the light to differing wavelengths — from ultraviolet to X-ray ranges.

The ALS features an enclosed ring that is 1.3 miles in circumference and through which electrons continuously move. Magnetic structures placed at intervals along the ring the excite the electrons to faster speeds, resulting in the emission of high energy photon beams at selected stations. Researchers are assigned space at various points along the ring based on the nature of their research. Other types of research conducted at the ALS facility include pharmaceutical analysis, surface and materials science and optical testing.

Since 1994, Berrah has been working with her students at one such station using an apparatus designed and constructed at WMU and shipped to Berkeley for her work. The apparatus, built with an earlier $250,000 grant from the Department of Energy, is being used by Berrah and her WMU team for a $450,000 research project that also is being funded by the agency for 1995-98. The equipment will be used in the new research as well.

The apparatus features a rotating chamber equipped with two spectrometers, which

(Continued on page two)

Photjournalist to discuss relationship violence

An award-winning photjournalist who has spent 13 years focusing her camera lens on the issue of domestic violence will make two presentations on campus Jan. 27 and 28.

"When Love Hurts: Abuse and Violence in Relationships" is the title of a free public presentation by Donna Ferrato on Jan. 27, in Miller Auditorium. She will present the work and the following morning at the same location in a special program for area middle and high school students.

Ferrato's slide presentation is specifically designed to help educate young people about the dynamics of relationship violence and is intended to help prevent such abuse by making young people aware of the issue and alerting them to some of the danger signals in a relationship.

Ferrato's presentation during which a panel of area law enforcement, legal and medical personnel will join Ferrato in responding to questions and comments from the audience.

The evening all-University celebration on Jan. 20 will include remarks by WMU President John R. LaNorris and Opening Night Speaker, who won last year's Residence Hall Association "I Have a Dream" speech contest, and LaDonna Upshaw, who will address the observance's theme. They will be followed by performances by international student dancers and the Voices of WMU Gospel Choir.

The University's observance is coordinated by the MLK Day Committee, a standing committee of the Faculty Senate. The 14-member committee, made up of students, faculty and staff members, is chaired this year by Diane K. Swartz, dean of students.

This marks the third year that WMU has officially recognized the birthday of the slain civil rights leader. Its acknowledgment of King's legacy, however, began immediately after his assassination in 1968 with the establishment of a support program for minority students in his name. It now serves all students.

The MLK Program annual banquet, in fact, has been a tradition at the University for many years. It is scheduled for 2 p.m. Sunday, Jan. 19, in the North Ballroom of the Bernhard Center. Bryan Wise, coordinator of the University's King-Chavez-Parks Program, will be the featured speaker.

The campus chapter of the National Association for the Advancement of Colored People will sponsor a commemorative march after the morning convocation and be joined in the evening by students from Miller Auditorium about noon and proceed to Martin Luther King Jr. Park near downtown.

The Center for Academic Support Services and the Western Student Association will offer a performance by the Jazz Lab band and readings from the Harlem Renaissance from 3 to 6 p.m. Jan. 20 in the University Center. Anyone may submit original poems they wish to read by sending them to the Academic Support Services, 424 Moore Hall by noon Thursday, Jan. 16.

The Jan. 20 convocation will be carried live on WMU's Educational Television system, as well as on Community Access Channel 30 through University Video Services. It will be re-broadcast on WXXM, the University radio station, WPXM, the University's television system, beginning at 8 p.m. Tuesday, Jan. 17.

(Continued on page two)

Did you know?

• Martin Luther King Jr. spoke on WMU's campus in 1963, to a crowd of 2,000 in Read Fieldhouse. His was the first lecture in a series titled "Conscience in America" sponsored by the honors college, the University Assembly Program Committee and the Student Council. King spoke on the topic of "Social Justice," saying, "the wind of change is blowing all over our world to- day, sweeping away old order and bringing in new order."

• The Martin Luther King Jr. Program was established at WMU in 1968, shortly after King’s assassination, to encourage minority youth who had little expectation of attending college to continue their education beyond high school. Its alumni include Ed Gordon, former Black Entertainment Television anchor and current NBC News correspondent.

• Although activities have taken place on campus for the three years to mark King's birthday, this is the third year the University has officially recognized the day by canceling classes so that members of the University community can attend the special events.
Book is futuristic view of the electronic global village

Today’s rapidly evolving computer and communication technologies are trigger-
ing an information revolution that will have political and social impacts as profound as those of the industrial revolution, accord-
ing to a new book by a WMU faculty member.

Andrew S. Targowski, business information systems, presents his view of the emerging global electronic village and its applications and impacts in the 21st cen-
tury in “Global Information Infrastructure: The Birth, Vision and Architecture.” He also takes an in-depth look at three interre-
lated subsets of the global information infra-
structure: national, enterprise-wide and local infrastructures. Kalamazoo’s TeleCity project figures prominently in the section on local infrastructure.

The 400-page hardbound book, pub-
lished by Idea Group Publishing of Har-
sburg, Pa., culminates five years of work. It is aimed at those who design and operate one or more of the four information infra-
structures, such as information systems and services specialists, network develop-
ers, social and management specialists, public administrators and politicians.

The volume’s introduction outlines the inevitable march toward an electronic glo-
bal village. “Electronic payment, paper-
ized and paper money is a thing of the past. It includes excerpts of remarks Vice President Al Gore made in 1995 during an international meeting on the Global Information Initiative.

That concept can be seen in Gore’s description of the global information infra-
structure, which he said will “promote” a new global economy live of economic progress, strengthens democracies, facilitates better solutions to global environmental chal-
enges, and create a greater sense of shared stewardship of our small planet.”

Physicist (Continued from page one)

are instruments that detect electrons ejected from the targeted samples by the intense light. When the photon beam is directed at gas samples introduced into the chamber, the spectrometers detect the results of the collisions between the photons and atoms or molecules. While the outer layers of an atom or molecule are easily disturbed by using commercial lasers, getting information about the very heart of the molecules or atoms requires energy of the intense level provided by the focused ALS photon beam.

“Such information is important not only from the point of view of understanding fundamental physics, but also for the development of new technologies and detection of radiation damage and environmental contamination as well as for minimizing energy loss and furthering the possibility of fusion energy,” Berrah says.

Berrah says using the photon beam tuned to the ultraviolet range allows researchers to learn how a very small molecule breaks down. That may lead scientists to under-
stand such things as the mechanism by which the ozone layer, which is comprised of small molecules, is being depleted. Using the photon beam tuned to the X-ray range, she says, will help scientists under-
stand the structure of very large molecules such as viruses and how they attack the human body.

“Before you are able to counteract some-
thing, she says, “you have to understand how it works and know what happens when it breaks down.”

Among the molecules to be examined by Berrah’s team will be the C60 or “buckyball” molecule that rocked the sci-
entific world when it was discovered in 1985. The discovery of the C60 molecule meant that diamonds and graphite were no longer the only pure forms of carbon known.

Berrah says that a deeper understanding of the unique physical structure of the C60 molecule will have important industrial and application implications for the future.

Working on her team will be leading physi-

cists in a number of fields from such prestig-
ious institutions as the Argonne National Laboratory, Lawrence Berkeley national laboratories and from Kansas State University, the University of Colorado and the University of Nebraska at Lincoln. This month, col-

Chapel recognized for leadership in reading

Joe R. Chapel, education and profes-
sional development professor, and the Dorothy J. McNees Reading Center and Clinic, has been recognized for his leader-
ship field of reading.

He was one of 22 people who received the 1996 Crystal Apple Award for dedi-

ated service to education. The Michigan State University College of Education, the College of Education Alumni Association and the Council for Exceptional Children honored the award at a special ceremony.

Chapel earned his bachelor’s degree from LeMoyne College and his master’s from MSU. A WMU faculty member since 1965, he deals with the diagnosis and reading achievement of clients with learning disabilities and is considered one of the top diagnostic-

Student workers rewarded

Do you have a student who makes a “world of difference” in the operation of WMU? Take a moment to nomi-
nate him or her as Student Employee of the Year.

As part of Student Employment Week Feb. 10-14, the Student Employment Re-

feral Service is collecting nominations for Student Employee of the Year. The state-
wide competition and possibly even region- al and national competition.

Nominees must be full or part-time students, but more are available by calling 7-2725.

MKD Day (Continued from page one)

21, and at 2 p.m. Friday, Jan. 24, on EdCABLE Channel 36, Playbacks on Community Access will be at 10 p.m. Wednesday, Jan. 22, on Channel 36 and at 6 p.m. Thursday, Jan. 23, on Channel 36.

The Office of the President has sup-

port this year’s observance with an allo-
cated budget of $4,000. The district’s MKD Day Committee, such as publicity and facilities rental, as well as grants to community agencies. The student coordination, student services and special events. The grants are administered by the committee.

A complete schedule of events is pub-

ished on page four of this week’s Western News and posted on WMU’s site on the World Wide Web at http://www.wmich.edu, under University Information.

Student Employment Week (Continued from page one)
The Office of Faculty Development sponsors the Diversity VideoFest scheduled for Jan. 24.

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

PUTTING IT INTO FOCUS — John MacKenzie works on putting the finishing touches on the Diversity VideoFest set.

Bronco fans will now be able to hear football, hockey and men's basketball games live from anywhere in the world. It's all part of the new videoconference on campus. The Division of Intercollegiate Athletics has reached an agreement with AudioNet to have the game broadcasts sent over the World Wide Web. Those tuning into the broadcast on their computers will be able to hear the voice of the Broncos, bringing them play-by-play action. The feed is taken directly from WEAT-FM.

The Diversity VideoFest, sponsored by the Office of Faculty Development, will be held on Jan. 24. The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

The Office of Faculty Development sponsors the Diversity VideoFest scheduled for Jan. 24.

Athletic events now broadcast on the Web

Bronco fans will now be able to hear football, hockey and men's basketball games live from anywhere in the world. It's all part of the new videoconference on campus. The Division of Intercollegiate Athletics has reached an agreement with AudioNet to have the game broadcasts sent over the World Wide Web. Those tuning into the broadcast on their computers will be able to hear the voice of the Broncos, bringing them play-by-play action. The feed is taken directly from WEAT-FM.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Athletic events now broadcast on the Web

Bronco fans will now be able to hear football, hockey and men's basketball games live from anywhere in the world. It's all part of the new videoconference on campus. The Division of Intercollegiate Athletics has reached an agreement with AudioNet to have the game broadcasts sent over the World Wide Web. Those tuning into the broadcast on their computers will be able to hear the voice of the Broncos, bringing them play-by-play action. The feed is taken directly from WEAT-FM.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Athletic events now broadcast on the Web

Bronco fans will now be able to hear football, hockey and men's basketball games live from anywhere in the world. It's all part of the new videoconference on campus. The Division of Intercollegiate Athletics has reached an agreement with AudioNet to have the game broadcasts sent over the World Wide Web. Those tuning into the broadcast on their computers will be able to hear the voice of the Broncos, bringing them play-by-play action. The feed is taken directly from WEAT-FM.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Athletic events now broadcast on the Web

Bronco fans will now be able to hear football, hockey and men's basketball games live from anywhere in the world. It's all part of the new videoconference on campus. The Division of Intercollegiate Athletics has reached an agreement with AudioNet to have the game broadcasts sent over the World Wide Web. Those tuning into the broadcast on their computers will be able to hear the voice of the Broncos, bringing them play-by-play action. The feed is taken directly from WEAT-FM.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Athletic events now broadcast on the Web

Bronco fans will now be able to hear football, hockey and men's basketball games live from anywhere in the world. It's all part of the new videoconference on campus. The Division of Intercollegiate Athletics has reached an agreement with AudioNet to have the game broadcasts sent over the World Wide Web. Those tuning into the broadcast on their computers will be able to hear the voice of the Broncos, bringing them play-by-play action. The feed is taken directly from WEAT-FM.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Diversity VideoFest scheduled for Jan. 24

The event will run from 11 a.m. to 3 p.m. in the Bernhard Center, Room 207. Athletes will receive buckeyes to be used on the golf course.

Athletic events now broadcast on the Web

Bronco fans will now be able to hear football, hockey and men's basketball games live from anywhere in the world. It's all part of the new videoconference on campus. The Division of Intercollegiate Athletics has reached an agreement with AudioNet to have the game broadcasts sent over the World Wide Web. Those tuning into the broadcast on their computers will be able to hear the voice of the Broncos, bringing them play-by-play action. The feed is taken directly from WEAT-FM.
Calendar

The master calendar maintained by the Office of Marketing, Public Relations and Communications for use in Western News is available through links on the WMU home page on the World Wide Web under University Information. Currently, there are three calendars available: January events; February events; and future events, which run from March through December. To view the calendars, type the system prompt. At the next menu, choose 1. Western News, 2. Western Michigan University, then choose 3. Campus Calendar. You will find options for 1. This Month’s Events, 2. Next Month’s Events and 3. Future Events. The calendars also are available through WMU’s Campus Computer Network and the World Wide Web under University Information.

Thursday, January 16

(thru 24) Exhibition, “Mail Art Show” by Department of Art, Sangren Hall, showdays, 7 a.m.-10:30 p.m., Saturdays, 6 a.m.-10:30 p.m. and Sundays, noon-midnight.

(thru 28) Exhibition, handmade books and lithographs by Jo Anna Poehlmann, Milwau-kee gallery, Gallery II, Sangren Hall, weekdays, 10 a.m.-3 p.m.

(thru 30) Exhibition, ceramic and mixed media sculpture by Katherine Ross, Chesterton, Ind. thru 30) Exhibition, academic education group show, Randaga and South Galleries, East Hall, weekdays, 10 a.m.-5 p.m.; reception, Friday, Jan. 24, 5-8 p.m.

Saturday, January 18

*Women’s basketball, WMU vs. Kent State University, University Arena, 2 p.m.

Student recital, Andrew Schnurr, double bass, Dalton Center Lecture Hall, 4 p.m.

Sunday, January 19

Martin Luther King Jr. Day: No classes; convocation, Miller Auditorium, 10 a.m.; see separate calendar on this page for more activities.

(thru 24) Exhibition, academic education group show, Randaga and South Galleries, East Hall, weekdays, 10 a.m.-5 p.m.; reception, Friday, Jan. 24, 5-8 p.m.

Tuesday, January 21

Recital, graduate choral conductors, Dalton Center Recital Hall, 5 p.m.

Wednesday, January 22

Meditation group, Kiva, Faunce Student Services Building, 8-8:30 a.m.

(thru 24) Management development program, “The Seven Habits of Highly Effective

Thursday, January 16

University Libraries (through Jan. 31) — Display on the life and work of Martin Luther King Jr., third floor rotunda, Waldo Library, during library hours.

Friday, January 17

Minority Student Leadership Council — Lock-in, “No Free Ride,” Student Recreation Center, 7 p.m.-6 a.m.

Sunday, January 18

Third Millennium Ministry — Voices of WMU Gospel Choir, United Voices of Praise and the Rev. John Tolbert of the Detroit Metropolitan Baptist Church, Kanley Chapel, 2 p.m.

MLK Program Annual Banquet — Celebrates MLK birthday and recognizes student academic achievement; special speaker, Louis W. Thomas, Knaves Mil- nator, King-Chavez-Parks Program; North Ballroom, Bernhard Center; 2 p.m.

Tuesday, January 20

Department of Dance — Dunham Tech-nique class, “African-American Dance Influence,” 3116 Dalton Center, 1-2:30 p.m., followed by panel discussion, 3116 Dalton Center, 2:30-3:30 p.m.

Department of English — “A Dramatic Reading of Rita Dove’s Verse Play,” The Darkest Face of the Earth,” “Kiva Room, Waldo Library, 3-5 p.m.

Department of Economics — Seminar by Jeann Kimmel of the W. E. Upjohn Institute, “Is the Glass Half Full or Half Empty? The Relative Economic Status of African-Americans,” 2206 Dunbar Hall, 3-4:30 p.m.

College of Education — Film and discussion, “The Road to Brown,” 2302 Sangren Hall, 3:30-4:30 p.m. and 4:30-6:30 p.m.

Center for Academic Support Programs and the Western Student Association — Performance by Jah Kings and readings from the Harlem Renaissance, West Ball-room, Bernhard Center, 3-6 p.m.

You Beautiful Black Woman and Sigma Lambda Gamma — Trivia bowl, “Cul-tural Competency,” 3770 Knaus Hall, 3:5 p.m.

Department of Dance — “Dance in the Media,” “African-American Dance Influences,” 3116 Dalton Center, 3-5 p.m.

Department of Biological Sciences and Chemistry and the Association of Minorities in Biological Sciences — Open house in chemistry and biological sciences laboratories, 4th and 5th floors, McCracken Hall, 4:30-5:30 p.m. and mixer, 3190 McCracken Hall, 5:30-6:30 p.m.

College of Education — Film and dis-cussion, “The Color of Fear,” 2304 Sangren Hall, 4:30-6:30 p.m.

Department of Educational Leader-ship — Panel and discussion, “Dr. Martin Luther King Jr.: Leadership That is More Than a Dream,” 3310 Sangren Hall, 4:30-6:30 p.m.

Department of Counselor Education and Counseling Psychology — Panel and discussion, “Building Multicultural Community by Listening and Reflecting on Professional and Personal Sto ries,” 2303 Sangren Hall, 5-7 p.m.

All-University Celebration — students LaNorris Alexander and LaDorna Up-shaw, international student dancers and the Voices of WMU Gospel Choir, East Ballroom, Bernhard Center, 7 p.m.

Haworth College of Business — The college will sponsor programs throughout the day.

Wednesday, January 22

Bertha Rehnolds Society — Film and discussion, “Dr. Martin Luther King Jr.’s Last Stand: The Unfinished Dream,” 3152 Knau Hall, 7-9 p.m.

Thursday, January 23

Young Black Males Support Network — Presentation by Na’il Akbar and discussion, “The Legacy of the Late Dr. Martin Luther King Jr.,” 3300 McCracken Hall, 4-5 p.m.

Beyond the Dream: Building Community at WMU

MKL DISPLAY — Among the myriad of events taking place on campus in honor of Martin Luther King Jr. birthday is a display on the life and work of the civil rights leader in Waldo Library. Carrie A. Jordan, University libraries, takes special pride in organizing the display each year. She and King were born on the same day — Jan. 15, 1929 — 39 years apart. “It makes me feel really connected and proud to have been born on the same date as a man who has done so much for our people,” she says. Jordan has filled five showcases on the third floor rotunda area with materials she has collected on the job, such as book jackets, and other items she has gathered on her own, such as placemats and postcards from a trip to Atlanta. Other items range from collector cards and photographs to cassette tapes and drawings. The display is open through Friday, Jan. 31, during regular library hours.

People,” Feitzer Center, 8 a.m.-4:30 p.m.; to register call 7-3232.

Human resources brown bag luncheon for managers and supervisors, “Discrimination Laws,” 157-159 Bernhard Center, 12:10-12:55 p.m.; to register call 7-3625.

Retirement reception honoring Shirley C. Woodworth, communication, the Olgands, School of Music Convocation Series concert, Christopher Laughlin, classical guitar, Dalton Center Recital Hall, 2 p.m.

*Men’s basketball, WMU vs. Eastern Michigan University, University Arena, 7 p.m.

*Admission charged