

Warped sat proves Einstein Theory of Relativity

REUTERS, Washington

Einstein was right -- again. Satellites that have been pulled slightly off their orbits show that the Earth is indeed twisting the fabric of space-time as it rotates, scientists said on Thursday.

They said their findings are the first to directly measure and prove an important aspect of Albert Einstein's General Theory of Relativity -- that a rotating body warps and twists the "fabric" that combines the three dimensions of space and the fourth dimension of time.

"As the Earth turns, it is actually twisting space-time with it. Near Earth, the twisting is greater," said Michael Salamon, a physicist at Nasa in Washington.

"This twisting of space-time, which is also referred to as frame-dragging, has never been directly observed before," Salamon told reporters in a telephone briefing.

"This is the first real, solid, direct evidence we have for the twisting of space-time caused by the spinning of a rotating body."

Erricos Pavlis of the Joint Center for Earth System Technology at Nasa and the University of Maryland and colleagues observed two satellites orbiting the Earth and found that they did shift as the planet pulled on space.

"We measured the distance from the Earth to the satellite with the accuracy of millimeters," Pavlis said. Their research was reported in the journal Nature.

The Laser Geodynamics Satellite I or LAGEOS I, a Nasa spacecraft, and LAGEOS II, a joint Nasa/Italian Space Agency satellite, are basically hunks of metal covered with reflectors that make them easy to follow and measure from the ground.

Their butterfly-shaped orbits are meant to simulate the movement of a spinning gyroscope. Einstein's theory predicts that a nearby spinning body -- such as the Earth -- will pull on space and cause a gyroscope to shift slightly on its axis.

There is no proof that some other force is not acting on the satellites, Pavlis said, but it is unlikely.

"It would have to be a very smart force to exactly mimic general relativity," he said.

"We have eliminated all of the forces that we do know -- tidal forces, et cetera and so forth, as well as gravitational model errors."

Pavlis likens the effect to a spoon twisting in a jar of molasses.

"Similarly, as the Earth rotates, it pulls space-time in its vicinity around itself. This will shift the orbits of satellites near Earth," he said.

Salamon said indirect evidence has been seen of frame-dragging, but this is the first direct measurement.

In April, Nasa launched Gravity Probe B, a probe carrying four gyroscopes, which the scientists say should prove Einstein's theory with even higher accuracy when its results are reported next year.



PHOTO: STAR

Hawkers occupy almost all the sidewalks and parts of the main roads in the capital despite various steps taken by Dhaka Metropolitan Police (DMP) to keep the roads jam-free. Picture shows people busy buying goods on the road adjacent to Gulistan Hawkerc Market yesterday.

OUTLAWS DEMAND TOLL

Shrimp traders in Satkhira flee home

OUR CORRESPONDENT, Satkhira

Male members of at least 13 families in four villages in Sadar and Talia upazilas are on the run after death threats by two outlawed outfits demanding tolls.

Last week, local shrimp traders, mostly from the Hindu community, received separate letters from Purba Bangar Communist Party (PBCP) and Purba Banglar Communist Party (ML-Janajuddho) cadres demanding tolls that ranged from Tk 50 thousand to 2 lakh.

In the letters they threatened to kill those failing to comply with. They also warned the recipients not to disclose it to the police.

Some of the threatened have paid negotiated tolls while others have left homes and taken shelter at upazila and district sadars.

Water crisis

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said a local resident. "Water in the area has become totally unfit for drinking and I have to buy drinking water every day," said Aminul Islam, a local resident.

Residents of Nakhla para and Shahinbag also complained about severe water crisis for the last six months.

"I have to buy one tank-lorry of water every day to fill my underground reserve tank so that my tenants don't leave my house," said Arshad Ali, a house owner of the area.

Residents near Bangladesh Institute of Administration and Management (BIAM) and Weekly 2000 offices at Eskaton area said stinking water supplied by the WASA is totally undrinkable.

Meanwhile, Managing Director of Dhaka Wasa ANH Akhter Hossain blamed illegal water connections for the leakage in water supply lines drawing sewer water.

"The Dhaka City Corporation (DCC) has 3 lakh 60 thousand holding numbers but Dhaka Wasa has 2 lakh 15 thousand water connections," he said, hinting at a large number of illegal connections.

He admitted that some staff of Wasa are involved in providing the illegal water connections.

He also claimed that water supply in Nakhla para and Shaheenbag has become normal as a new water pump was set up in the area.

KCC men

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arbitrary imposition of taxes on holdings through a secret assessment for the year 2003-2004.

Calling the daily the mouthpiece of the people of southwestern region, leaders of AL, BNP, Jamaat and Jatiya Party have warned the mayor of dire consequence if he continues his move against freedom of press.

Joint Secretary General of BNP Central Committee and Whip Mohammad Ashraf Hossain on Thursday said his party has nothing to do with the KCC move.

He criticised the mayor for his support to burning of the copies of the daily and demand for cancellation of its declaration.

Bangladesh Jubo Sangram Parishad, Khulna unit, has announced a daylong programme on Monday to protest the recent move against Dainik Purbanchal.

Liaqat Ali, editor of Dainik Purbanchal and also a member of the executive committee of Newspaper Owners Association of Bangladesh (NOAB), on Thursday reaffirmed his newspaper's stance.

He said the reports were not aimed at tarnishing the image of KCC mayor but at drawing his attention for a remedy to public sufferings.

The mayor was not available yesterday for further comments as he was in Dhaka. However, KCC Public Relations Officer Abu Taher said the Purbanchal reports were motivated and not based on facts.

Exports to US

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RMG exports went down by \$570 million or 26 percent during the same period, to stand at \$1628 million in the last fiscal year from \$2198 million in 2000-01, according to Export Promotion Bureau (EPB).

"Quota phaseout, lead time problem and the US decision to provide preferential market access for Sub-Saharan and some other countries have adversely affected our export market in the US," Annisul Huq, president of Bangladesh Garment Manufacturers and Exporters Association, told The Daily Star.

Bangladesh still has potential for increasing export to the US market but the exporters must get duty-free access there, the BGMEA chief said citing the example of an ever-increasing Chinese share in the US market.

Recent studies suggest that Chinese share in the US market may go up to 50 percent from the present level of 16 percent. Indian exports to the US may also rise sharply to secure 16 percent market share from the present four percent, Huq noted.

The BGMEA chief fears 25 to 40 percent RMG units may face closure in the next two or three years, rendering thousands of garment workers jobless if Bangladesh fails to sustain in the stiff competition after expiry of the multi-fibre arrangement (MFA).

Export income from the US, which was 38.8 percent of Bangladesh's total earnings \$6467 million in 2000-01, declined by 13

percentage points in the last three years to stand at only 25.9 percent of the total earning \$7602.99 million in 2003-04.

Professor Mustafizur Rahman, research director of the Centre for Policy Dialogue (CPD), said garment exports to the US market have declined in certain categories, which are now not enjoying the quota facilities. In the already quota phased out categories Bangladesh's position in the US market slipped to seventh from the second place.

Income from other categories that are still enjoying quota facility also dipped mainly due to lead-time problem and a declining trend in prices, he observed.

"China has cut prices of its products in the US market by 46 percent that has created pressure on other exporters including Bangladesh. Our exporters are also facing stiff competition from India and Turkey in some other categories," said Rahman.

The CPD researcher said although there is an upturn in the US economy and the demand for certain products including IT-related products and automobiles has increased, response from garment buyers is still low. Bangladesh mainly exports woven garment to the US where its demand did not increase substantially, he added.

Despite the decline in the US market, export earnings hit a new high in the last fiscal year reaching \$7602 million. RMG constitutes more than three-fourths of the total earning.

Corruption check

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processing and approval procedure for goods or work and report quarterly to the Central Procurement Technical Unit (CPTU).

A public procurement act is being formulated under which compliance with the Public Procurement Regulations, 2003 and the notification will be monitored. A code of conduct will also be put in place for government officials and consultants, prescribing punishment in case of breach.

Officials at the planning ministry said the act would be placed at the cabinet by February and the code of conduct formulated by December.

The Finance Division earlier issued a circular delegating financial powers to certain officials. According to the circular, purchases worth over Tk 25 crore have to be approved by the Cabinet Committee on Government Purchase. However, the ministry concerned can approve purchase up to Tk 25 crore.

In case of development expenditure, departmental heads can approve orders for public works involving not more than Tk 7 crore, project directors can approve up to Tk 2 to 4 crore.

For purchase and supply of goods, departmental heads can approve up to Tk 5 crore and project directors up to Tk 2 crore.

Departmental heads can approve orders for public works up to Tk 1 crore, divisional officials Tk 15 lakh, district officials up to Tk 7 lakh and upazila officials Tk 3 lakh in case of revenue expenditure.

Departmental heads can approve orders for goods up to Tk 10 lakh, divisional officials Tk 3 lakh, district officials up to Tk 2 lakh and upazila officials Tk 1 lakh.

In case of small autonomous bodies, the boards can approve purchase involving up to Tk 10 crore in development and revenue expenditure and for large bodies, the boards can approve up to Tk 12 crore.

Chief executives and other officials of public corporations can also approve purchase deals. They have also been given the power to directly make purchase worth Tk 15,000 to

50,000.

All purchases have to be made in accordance with the Public Procurement Regulations, 2003 and the notification, and the TEC has to evaluate the purchase proposals or tenders in two weeks.

Proposals and tenders have to be approved in four to seven weeks and work order issued in a week if the approving authority is the project director or the relevant minister or ministry.

The Cabinet Committee on Government Purchase will have to approve purchase proposals in a maximum of eight to ten weeks in case of normal cases and in eight to eleven weeks in case of complicated cases.

Food officials

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abolished in 1983 and new positions were created as upazila food controllers giving them the rank of second class. But after years of movement, Prime Minister Khaleda Zia's earlier government took up the issue seriously and made the necessary move for upgrading the positions in 1992.

In the next few years a host of interministerial meetings saw the formation of several high-level committees on this issue yet things did not go the food officials' way.

When contacted, food ministry sources acknowledged receiving queries from the establishment ministry on promotion of upazila food controllers last June but did not supply the latter with the necessary information as yet.

Against this backdrop, the grass-roots level food officials recently held a meeting with both the current Food Minister, Chowdhury Kamal Ibne Yusuf, and the last Food Minister, Abdullah Al Noman.

Food officials now said that despite the assurance and recommendation of an Establishment Ministry, an additional secretary-headed committee, their demand was not being met due to a bureaucratic bottleneck and sluggishness.

They said they were planning to strike immediately unless their demand is met without further delay.

Another defeat

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over bowled by left-arm spinner Vettori.

Rajin might feel unlucky being adjudged caught behind by debutant English umpire Mark Benson as TV replays showed that the ball had clearly missed the bat.

But there was little doubt about the class of a bespectacled Vettori, who had the technically flawed Bangladeshi batsmen twisting and turning with almost every delivery.

The home side lost their last six wickets in the space of 39 runs and after having a hearty lunch the Kiwis took just two minutes to consign Bangladesh to their 28th Test defeat.

Except for Nafees Iqbal and Mohammad Ashraful none of the other batsmen showed any application while at the crease. The pair added 46 runs for the fourth wicket, which was also the highest stand in Bangladesh's second innings.

Debutant Nafees went on to score 49 but had to pay the price for attempting a risky second run.

First innings half-century Ashraful (26) looked more compact until a ball from Vettori that bounced awkwardly took the edge of his bat into the safe hands of Scott Styris at slip.

Alok Kapali disappointed again. Oblivious of the basic: never cut against the spin, the Sylhet right-hander tried to take on off-spinner Wiseman but only be caught for a duck. Stand-in-skipper Khaled Mashud (1) also failed for a change and Manzurul Islam (1) hung his bat in the air for a kiss of death.

Bowling 22 overs from one end Vettori dismissed Tareq Aziz in the last ball before lunch to finish with 6-28. It was his eighth 5-wicket haul.

Wiseman ably supported him with 3-64.

Wicketkeeper Brendon McCullum was adjudged man-of-the-match for his maiden Test century, a fine 143, and six catches.

Academics term

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criticised the naming of the NU during its very inception.

Former Vice-Chancellor of Dhaka University Prof Emajuddin Ahmed said, "I don't think renaming the National University after late president Ziaur Rahman would increase his dignity."

"If I were the incumbent vice-chancellor of National University, I would never have done it," he added.

Prof Mozaffar Ahmed said an institution should not be named at the whim of an individual or a group. He said such a practice reflects the poor quality of political culture of Bangladesh.

Expressing disgust at the decision, Prof Ahmed said there is many a important issue left to deal with, I have no time to spare for this.

Talking to The Daily Star, Dr AAMS Arefin Siddique, president of Dhaka University Teachers Association (DUTA) and former syndicate member of National University, said the decision to change the name of NU shows the political attitude of the NU authorities.

"The National University is on the verge of a collapse as it is deeply troubled by appointments made with political ends," observed Dr Arefin.

He said the NU vice-chancellor has engineered the renaming only to consolidate his position in the ruling party.

"The NU needs to be dismantled and colleges which offer honours and masters course should be brought under some public universities," the Duta president said.

Bangabandhu Parishad and JSD-backed Bangladesh Chhatra League blasted the NU vice-chancellor and the senate for the renaming decision.

Leaders of the organisations said that the decision corroborates the culture of wholesale politicisation by the BNP-Jamaat led coalition government.

They said they will resist the government's attempt to change the name of the National University. They will not let the decision take effect at all costs.

Poll finds Bush

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are tentatively backing a candidate while remaining open to changing their minds.

They are more likely than others to disapprove of Bush's job performance and believe invading Iraq was a mistake. And they are more likely than other voters to believe the nation is on the wrong track, according to the poll conducted for the AP by Ipsos-Public Affairs.

More in this group lean toward Kerry than Bush. But persuadable voters backing Kerry are more likely to switch sides than those backing Bush and they're more likely to trust Bush than Kerry to protect the nation.

"Kerry spent his whole time in the debates saying, 'your president has not done this or done that,' instead of saying what he would do as president," said Laurie Anuszkiewicz, a businesswoman from Beckley, W. Va.

Some surveys have found that a majority of voters saying they're concerned about the risks of changing presidents at a time of terrorist threats and war.

"I'm pretty sure I'll vote for Kerry," said Mary Anne Connolly of Middletown, N.J. "It's more that I don't want Bush. I'm still not comfortable with Kerry. I'm not sure he's real strong on foreign policy."

Despite doubts about Kerry on national security and strength of leadership, Bush hasn't been able to pull away from the Democrat.

Less than half of likely voters in the AP-Ipsos poll, 47 percent, approve of Bush's job performance. A rating below 50 percent spells trouble for any incumbent, and the president hasn't been above that threshold since before the first debate.

Some 56 percent of likely voters believe the nation is on the wrong track, another warning sign. By an 18-point margin, voters believe Kerry would be best at creating jobs. They are evenly split on who would do the best job on Iraq.

The president fares better on national security issues like terrorism. A majority of likely voters approve of Bush's handling of the war on terror and foreign policy. By 7 percentage points, more believe he would do a better job than Kerry of protecting the country; Bush had a 23-point advantage in March.

Mark Silva, 56, of Redding, Calif., has his problems with Bush, but definitely doesn't like Kerry. "I guess we're stuck with Bush," he

7 killed

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Gilbert said the attacks on the weapons warehouses were triggering secondary explosives.

Earlier, marines and insurgents clashed when rebels fired on marine positions with "small arms, RPGs (rocket-propelled grenades) and mortars near the city" at 5:00 pm (1400 GMT), the military said.

"Marines countered these attacks with substantial and proportionate ground fires and air-delivered precision strikes."

Fallujah has seen almost daily strikes on suspected safe houses of Zarqawi, blamed for many of the car bombings and kidnappings in Iraq.

Determined to regain control of the no-go zone, more than 1,000 joint forces have encircled the city for the last week. Iraqi Prime Minister Iyad Allawi last week ordered Fallujah residents to surrender Zarqawi or face invasion.

Allawi on Thursday narrowly escaped a mortar attack while on a trip to Mosul, in the north of the country, as officials expressed concern about a lack of experts on the ground to help prepare for landmark elections set for January because of security fears.

Iraqi Foreign Minister Hoshiyar Zebari lamented the fact that the dangerous climate was keeping UN experts out of the country.

The United Nations largely pulled out of Iraq after its Baghdad headquarters was targeted in a suicide car bombing in August 2003 that killed 22 staff.

Major Michael Holley, the military prosecutor, told the court: "He's (Frederick) an adult and capable of telling, as we learned, the difference between right and wrong."

50 SIs

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the police headquarters and DMP to stop transfer, said the source.

A number of SIs, preferring anonymity, alleged that the list was prepared not only on the basis of performance but also on consideration of loyalty to the present government.

Following a home ministry meeting in September, DMP Commissioner Ashraful Huda issued letters to the deputy commissioner (DC) of DB and DCs of DMP's east, west, north and south zones to prepare lists of incompetent SIs.

On receiving the lists, the DMP commissioner forwarded it to the IGP at the end of September.

"We evaluate the performance of SIs on the basis of their success rate in anti-crime drives, arrest of criminals and seizure of illegal firearms and contraband drugs and honesty and sincerity," said a DC of police.

He said the police headquarters recently started transferring some SIs to less important places and replacing them by SIs with good performance.

"The process of transfer began around two weeks ago and over 30 percent of the SIs on the list have already been transferred," he added.

said.

Among the poll's other findings: Twenty-four percent say they have already voted or will cast ballots before Election Day. Those who voted early were just as likely to back Kerry as Bush.

A third of likely voters have been contacted by a candidate, campaign or outside group seeking support. About as many said they were asked to vote for Bush as for Kerry.

About three-fourths of likely voters said they have seen ads for Bush and ads for Kerry.

The steady crossfire of attacks on the air waves has worn out the patience of James Bates, a 44-year-old independent from Reno, Nev.

"I'm sick of all this innuendo, all this untrue stuff," Bates said. "It has no basis in fact. Both sides are guilty of it it's a crime."

Jalil

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despotic rule of four-party alliance, Jalil continued.

Dr Harun Ur Rashid read the keynote paper. He noted that during the BNP-Jamaat's rule of three years, about 30 thousand people were killed, about 1.5 lakh politically persecuted while over 17 lakh fell victim to various crimes.

Besides, as many as 307 people were killed in police custody, said Dr Harun, a professor of political science in Dhaka University.

Dr MA Wazed Mia, eminent scientist of the country, presided over the discussion. He said political parties should play a positive role to educate the new generation to take advantage of developments in science and technology.

"But instead, some political parties exploit the young generation in their own interests. This must end," he stressed.

Among others, Bangladesh Awami Jubo League Chairman Jahangir Kabir Nanak, Dhaka City AL Organising Secretary Shah Alam Murad spoke at the discussion.

Ulfa

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Goswami who would submit to the prime minister a memorandum that include discussions on the sovereignty issue.

Goswami had recently said that some top Ulfa leaders had established contact with her and expressed their desire for talks with the government.

She had, however, made it clear that she did not want to be a mediator between Ulfa and the government, but sincerely wanted the negotiations to take place and the vexed insurgency problem to end.

Welcoming Goswami's statement that she favoured talks with the Ulfa, Chief Minister Tarun Gogoi said that his government, if required, would cooperate to facilitate such a process.

On the NDFB unilateral ceasefire from October 15, the Ulfa chief said that his outfit's ideology differed from that of the NDFB. "They are free to do whatever they like. Our goals are different."

Warning Nagaland Chief Minister Nephthi Rio against accusing the Ulfa of triggering the recent blasts in Dimapur, Barua asserted, "we are in no way responsible for the twin blasts."

US soldier

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said he would appeal. The other two soldiers so far convicted were jailed for eight months and one year.

Frederick, 38, had pleaded guilty to five charges of abusing detainees at Abu Ghraib in October and November last year, including making three prisoners masturbate. He also punched one prisoner so hard in the chest that he needed resuscitation.

Major Michael Holley, the military prosecutor, told the court: "He's (Frederick) an adult and capable of telling, as we learned, the difference between right and wrong."

"How much training do you need to learn that it's wrong to force a man to masturbate?"

The Abu Ghraib affair shocked the world when it broke in April with pictures splashed across the media. Five more military police, including three women, are due to face courts martial in the coming months, two more of them this week.

In Britain, Hoon said the troop movement was to help boost security for Iraqi elections due in January.

"This deployment is a vital part of the process of creating the right conditions for the Iraqi elections to take place," he told parliament.

Some critics have accused British Prime Minister Tony Blair of trying to help President Bush's re-election bid.

A senior Bush administration official called that idea preposterous. "It is clearly a request made by military commanders based on military needs," said the official, who asked not to be identified.

Hoon gave no precise details about when the forces would move or to where, but he said they would remain under the operational command of British military chiefs, not Americans.